TRAFFIC RECORDS COORDINATING COMMITTEE

Strategic Plan

FY2019 – FY2022

(updated May 14, 2018)

General Information

Emphasis Areas

Priority and Completed Projects

Appendices

Traffic Records Coordinating Committee (TRCC)

In Michigan, the traffic data systems that make up a comprehensive traffic records system are in multiple state departments. It is essential, therefore, that the operation and management of these systems are coordinated to ensure that the crash data is accessible, timely, accurate, complete, uniform and integrated for all users within the State.

Prior to 1994, coordination of these systems took place through an interagency work group that met every other month. In 1994, this work group was absorbed into the Michigan Traffic Safety Management System becoming the Data Action Team (DAT), one of 13 action teams created within this system. Membership within the DAT expanded to include traffic safety data users from across the state. This expansion changed the role of the DAT from strategic to operational. Recognizing the need to continue coordination of these data systems at a strategic level, an executive level group continued to meet separate from the DAT. These two groups were combined to create Michigan's Traffic Records Coordinating Committee.

In 2002, the Michigan State Safety Commission and the Michigan Traffic Safety Management System were combined to create the Governors Traffic Safety Advisory Commission (GTSAC). The Traffic Records Coordinating Committee continues to serve as an action team within the GTSAC structure and has responsibility for addressing traffic crash record issues within the state.

In Michigan, TRCC membership is made up of any group, agency or individual who has an interest in, and can provide to other members, a perspective needed to improve the timeliness, accuracy, completeness, uniformity, integration, and accessibility of traffic records. While Memorandum of Understandings (MOUs) exist between member agencies, TRCC membership is voluntary and can be subject to change at any point. The TRCC has no authority to set policy, establish rules, or otherwise impose its authority on any group, agency or individual. Work groups and technical committees are established based on current projects, activities and/or issues at hand. The full TRCC (executive and technical committees) currently meets on an annual basis.

Within the TRCC is an Executive Committee that provides leadership to the larger, full TRCC. The Chair of the TRCC is also a member of the Executive Committee and is rotated among the Executive Committee membership on an bi-annual basis. The TRCC keeps the GTSAC apprised of TRCC activity, projects and/or accomplishments through reports at the bi-monthly GTSAC meetings. The Executive Committee is comprised of a representative from the Michigan Department of State Police – Criminal Justice Information Center, Michigan Department of State, Michigan Department of Transportation, Michigan Department of Health and Human Services – EMS Office, Michigan State Courts Administrative Office, the Michigan Office of Highway Safety Planning, and the Michigan Department of Technology, Management, & Budget. The TRCC Executive Committee currently meets on a quarterly basis.

The TRCC Charter can be found in the Appendix Section - Appendix A.

Traffic Records Assessment

In 2004, 2009, and again in 2014 the Office of Highway Safety Planning (OHSP) requested the National Highway Traffic Safety Administration (NHTSA) to facilitate a statewide, comprehensive traffic records assessment. NHTSA proceeded to assemble a team of traffic records professionals representing the various disciplines involved in a state traffic records system. Concurrently the OHSP carried out the necessary logistical and administrative steps in preparation for the online assessment via the State Traffic Records Assessment Program (STRAP). A team of professionals with backgrounds and expertise in several component areas of traffic records data systems (crash, driver/vehicle, roadway, enforcement and adjudication, and EMS and trauma data systems) conducted the assessment.

The scope of the traffic records assessment included all the data systems comprising a traffic records system. The purpose of this assessment was to determine whether Michigan's traffic records system can support management's needs to identify the state's safety problems, to manage the countermeasures applied to reduce or eliminate those problems and to evaluate those programs for their effectiveness.

The 2014 Traffic Records Assessment Executive Summary can be found in Appendix B.

Strategic Planning

A comprehensive Traffic Records Strategic Plan should define a system, organization, and process for managing the data and attributes of the roadway, drivers, passengers and vehicles to achieve the highest level of highway safety by integrating the work of disciplines and agencies involved. **Simply put, a strategic plan identifies where the organization wants to be at some point in the future and how it is going to get there.** The "strategic" part of any planning is the continual attention to current changes in the organization and its external environment, and how this may affect the future of the organization and its established goals.

To manage this complex system and to achieve the level of integration necessary to meet the highest levels of safety, 4 key assumptions must be understood:

1. An organizational structure exists that will allow for the integration of the agencies involved in highway safety.
2. A formal management process is in place that will coordinate the activities of these agencies in a manner that will efficiently achieve the stated goals, mission and vision.
3. The planning process is at least as important as the planning document(s) itself
4. The planning process is never "done" – it's a continuous cycle

This strategic plan is a multi-year plan which will be updated annually and/or as needed. The strategic plan was developed to address the timeliness, accuracy, completeness, uniformity, integration and accessibility of all traffic related data and systems and to provide the mechanism to ensure the expenditure of safety funds are done so with these elements in mind.

Vision
All roadway users arrive safely at their destinations.

Mission
Improve the timeliness, accuracy, completeness, uniformity, integration, and accessibility of crash data and systems to enable stakeholders and partners to identify countermeasures to address traffic safety issues.

Goals
- Maintain a comprehensive TRCC composed of members from the traffic safety community whose purpose is to jointly set the direction and future on matters related to Michigan traffic record data systems.
- Benchmark and measure the timeliness, accuracy, completeness, uniformity, integration and accessibility of traffic data that is needed to identify priorities for national, state and local traffic safety programs.
- Facilitate and coordinate the integration of systems within the state, such as systems that contain crash related medical and economic data, with traffic crash data.

Measures of Impact and Evaluation
In developing and implementing emphasis area strategies, the TRCC will determine the level of impact and success of efforts and resources expended to:
- Secure baseline data from relevant sources to determine the current 'Crash Picture' for the state.
- Develop and determine priorities and programming based on critical data analysis and potential emerging safety issues.
- Develop relevant measures of activity and impact, and gather and use such data as the basis for new program development and requests for traffic records funding.

An annual report will be prepared to provide information on the status of all funds awarded under Section 405-c including the list of projects implemented in the past fiscal year, brief descriptions of activities completed and any problems encountered.

Emphasis Areas
To support the mission, vision and goals of the strategic plan, information was utilized from the 2014 Traffic Records Assessments and through TRCC general and executive level meetings and from other State, Local and Federal safety partners at various meetings, forums and conferences. In addition, the generally accepted "E's" of traffic safety (Engineering, Enforcement, Education and Emergency Medical Services) were considered in establishing emphasis areas. This plan outlines the high-level activities and projects that provide a long term (5 year) direction of traffic records data and systems in Michigan in the following areas:
- Crash
- Citation/Adjudication
- Vehicle/Driver
- Injury Surveillance System Components
- Roadway
- Data Use & Integration
- TRCC
- Strategic Planning

Summary of Accomplishments

This section contains brief summaries of annual accomplishments of each traffic records emphasis area to date. Further detailed and updated information will be provided in subsequent sections of the strategic plan.

Crash

Initial steps have been taken to create a procedures template for the Traffic Crash Reporting Unit (TCRU). In addition, we began creating a list to prioritize what procedures should be updated first, along with developing a process flow diagram for each.

Citation

No action has been implemented thus far for any of the citation strategies.

Vehicle/Driver

The Michigan Department of State is beginning the review and exploration of possibilities of going to real time for NMVTIS and becoming a more active participant in PRISM.

Business requirements and inter-agency fact finding began in 2015. The MDOS is a participant on the TRCC Data Integration Workgroup. Efforts are underway to begin exploring development and/or enhanced integration between the various traffic records databases.

MDOS internal staff are reviewing better ways to demonstrate access that's given and the interactions that are shared with law enforcement agencies and courts.

MDOS is currently reviewing the data that's received and developed error reports to share error data back to courts for resolution. MDOS has drafted and submitted an information technology (IT) program enhancement request to resolve some of the programmatic court errors. This would prevent the errors from being sent back to the courts for manual resolution. MDOS is awaiting prioritization to begin implementation of this request.

Injury Surveillance

No action has been implemented thus far for any of the injury surveillance strategies.

Roadway

At the November 18, 2015 Data Committee Meeting for the TAMC a presentation was given by Michigan's Local Agency Technical Assistance Program (LTAP) on using Roadsoft for FDE collection. Roadsoft is a graphically designed, integrated roadway management system developed for Michigan's local agency engineers and managers to use in the analysis and reporting of roadway inventory, safety, and conditional data.

On March 15, 2016, the federal data elements (FDE) requirements were published in the Federal Register. MDOT is working to modify Roadsoft to add or modify fields to become fully MIRE-FDE compliant.

TAMC is investigating the feasibility for providing guidance and tools to local agencies in MIRE FDE collection. TAMC will be conducting a MIRE FDE road survey and may conduct a pilot MIRE FDE collection study. If a tool is available for collection on MIRE FDE, TAMC may be more likely to support future MIRE FDE collection. This proposed project combines the resources of MDOT, TAMC and Michigan Tech University, while taking advantage of the existing investment that has already been made in Roadsoft.

CRASH

Recommendation: 1 of 3

Improve the procedures/process flows for the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory

Deficiency Identified:

There does not currently exist formal process flow diagrams (or a narrative description) documenting key processes governing the collection, reporting, and posting of crash data, to include the submission of Commercial Motor Vehicle (CMV) crash data to SafetyNet.

Strategies:

Create formal process flow diagrams to outline accurate and up to date documentation detailing the policies and procedures for key processes governing the collection, reporting, and posting of crash data, to include Fatality Analysis Reporting System (FARS) and CMV data.

Accomplishments: (as of March 2018)

Five procedures and process flow diagrams are in draft form, with two near completion. Now, we have identified nine that are on the radar to be worked on after the five are completed.

Project Name	Establish Process Flow Diagrams for Processing Crash Data					
Priority (select one: High, Medium, Low)		Medium				
Status: (select one: Proposed, Planned, Active, Completed)		Planned				
Lead Agency	Michigan State Police					
Project Description/Purpose	Define and establish formal process flow diagrams for processing crash data.					
Partners	MSP – CJIC Traffic Crash Reporting Unit (TCRU)					
Performance Measure (select all that apply)		Accuracy	Completeness	Uniformity		
Website	None					
Project Director	Sydney Smith					
Address	7150 Harris Drive, Dimondale, MI 48821					
Phone	517-284-3035					
E-mail	Smiths57@michigan.gov					
Agency	MSP					
Impact/Results	The documentation of key processes in the crash data life cycle would complete the quality control documentation and serve as a template for other states.					
Start	10/1/2018					
End	9/30/2022					
Funding Source	N/A					
Cost	N/A					
Project Benchmarks	Formal process flow diagrams and/or narrative descriptions					

Recommendation: **2 of 3**
Improve the interfaces with the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory

Deficiency Identified:
The Crash System does not have interfaces with the Citation/Adjudication System, or the Injury Surveillance System.

Strategies:
Interfaces have been established for the Driver, Vehicle and Roadway Systems. As part of Michigan's Data Integration Project, work to develop a roadmap and timeline for establishing interfaces for the Citation/Adjudication System and the Injury Surveillance System. This recommendation will be included as part of the data integrations that are being identified in Michigan's Data Integration Project.

Accomplishments: (as of May 8, 2018)
The TRCC Data Integration Project began in April of 2017. To date the following has been completed:
Waves Started:
Wave 1 - Breathalyzer Person, Officer, Arrests (Tests): Start Date 1/22/2018
Wave 1 - Crash - Vehicles and Officer: Start Date 1/29/2018
Wave 1 - eDaily Vehicle and Officer: Start Date 02/19/2018
Wave 2 - DRIVER / VEHICLE, GDL, EMS NEMSIS, SNAP: Start Date 02/22/2018
Wave 3 - COURTS - JIS/JDW and Car Seats: Start Date 4/07/2018 (beginning initial load and profiling)
Production Cut-Over (Select): 03/06/2018
Major Activity:
Test Cases Developed: eDaily (131), MICR (176), Crash (159), Breathalyzer (64)
Test Cases Executed: eDaily (131), MICR (150), Crash (159), Breathalyzer (64)

Project Name	Develop Roadmap and Timeline for Interfaces with the Crash System					
Priority (select one: High, Medium, Low)	High					
Status: (select one: Proposed, Planned, Active, Completed)		Active				
Lead Agency	Michigan State Police-CJIC					
Project Description/Purpose	Develop a roadmap and timeline for establishing interfaces for the Citation/Adjudication System and the Injury Surveillance System, with the Crash System.					
Partners	OHSP, JDW, MDHHS-EMS, MDOT, MSP, DTMB, MDOS					
Performance Measure (select all that apply)	Timeliness	Accuracy	Completeness	Uniformity	Integration	Accessibility
Website	None					
Project Director	Deepinder Uppal					
Address	7150 Harris Drive, Dimondale, MI 48821					
Phone	517-599-4887					
E-mail	uppald@michigan.gov					
Agency	MSP					

Impact/Results	Ability to access additional traffic records databases in efforts to analyze data and improve on traffic safety programming
Start	10/1/2018
End	9/30/2022
Funding Source	405-c
Cost	$2,950,000 to date (Entire Data Integration Project)
Project Benchmarks	Established integration between crash, citation/adjudication and injury surveillance systems

Recommendation: 3 of 3

Improve the data quality control program for the Crash data system that reflects best practices identified in the Traffic Records Program Assessment Advisory

Deficiency Identified:

There are currently no quality control measures established for data managers and users for Uniformity, Integration, and Accessibility. In addition, Michigan does not currently include reviewing the narrative and diagram as part of the data acceptance process. This is only done when a crash is manually located.

Strategies:

Define and establish quality control measures for the areas of Uniformity, Integration, and Accessibility. Also, define and establish a quality control procedure to include a review of the narrative and diagram.

Accomplishments: (as of March 2018)

1. Quality Control efforts are going strong in the TCRU. Ms. Melissa Marinoff has joined the team as the Quality Control Analyst. Melissa is performing quality control on ten areas we have identified as top concerns. These involve drugs, alcohol, distracted driving, and commercial motor vehicles. The TCRU has been given access to Forensic Advantage which is an application used by the MSP Laboratory to record alcohol and drug test results, as well as other data. The TCRU is now able to search for alcohol and drug results based on what is recorded on the crash and make the necessary updates.
2. University of Michigan Transportation Research Institute has begun a project to apply text-mining methods to UD-10 narratives with two goals: 1) To extract new data elements (or supporting data elements), and 2) To explore the utility of text mining algorithms to flag items for quality control review.

Project Name	Improve Crash Quality Control Measures			
Priority (select one: High, Medium, Low)		Medium		
Status: (select one: Proposed, Planned, Active, Completed)	Proposed			
Lead Agency	Michigan State Police			
Project Description/Purpose	Define and establish quality control measures for the areas of Uniformity, Integration, and Accessibility. In addition, incorporate a review of the narrative and diagram into the quality control procedure.			
Partners	MSP – CJIC Traffic Crash Reporting Unit (TCRU)			

Performance Measure (select all that apply)		Accuracy	Completeness	Uniformity	Integration	Accessibility
Website	None					
Project Director	Sydney Smith					
Address	7150 Harris Drive, Dimondale, MI 48821					
Phone	517-284-3035					
E-mail	Smiths57@michigan.gov					
Agency	MSP					
Impact/Results	Improved quality of crash report narratives, diagrams, and coded contents					
Start	10/1/2018					
End	9/30/2022					
Funding Source	405 (c)					
Cost	$60,515					
Project Benchmarks	Incorporation of quality control reviews in all aspects of the TCRS data acceptance process					

CITATION / ADJUDICATION

Recommendation: 1 of 3

Improve the description and contents of the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:

Citations and Adjudication systems do not adhere to the Functional Requirements Standards for Traffic Court Case Management, the NIEM Justice domain guidelines, the National Center for State Court guideline for court records, NHTSA's Model Impaired Driving Records Information System specifications, or use the Global Justice Reference Architecture.

Strategies:

Create an action plan to review these standards and determine their applicability for the potential implementation on existing systems

Accomplishments: (as of May 2018)

No action has been implemented thus far for this strategy.

Project Name	National Standards for Citation and Adjudication systems					
Priority (select one: High, Medium, Low)		Medium				
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	State Court Administrative Office					
Project Description/Purpose	Implementation of National Standards for existing Citation and Adjudication Systems					
Partners	MSP, Local Law enforcement, Courts, and Vendors that support each					
Performance Measure (select all that apply)		Accuracy	Completeness	Uniformity		
Website	N/A					
Project Director	Cody Gross					
Address	925 W. Ottawa, Lansing, MI 48909					
Phone	517-373-8777					
E-mail	grossc@courts.mi.gov					
Agency	State Court Administrative Office					
Impact/Results	Create a consideration or recommendation for Michigan to consider implementing a central repository for all citation data, not just adjudicated data.					
Start	10/1/2018					
End	9/30/2022					
Funding Source	TBD					
Cost	TBD					
Project Benchmarks	Documented recommendation for Michigan to proceed with a statewide citation repository.					

Recommendation: 2 of 3

Improve the data dictionary for the Citation and Adjudication systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:

For citations, there is no statewide tracking system or data dictionary. Therefore, not all fields are clearly defined and represented in field data collection manual, training materials, coding manuals and corresponding reports. There is no indication about what data fields are populated through integration with other traffic records system components.

For Case Management Systems, only one data dictionary of the 7 case management systems partially defines the fields in the system and does not identify the data elements populated by data integration.

Strategies:

Create an action plan that will detail the steps necessary to provide the data dictionary documentation as outlined and required in the Traffic Records Program Assessment Advisory.

Accomplishments: (as of May 2018)

No action has been implemented thus far for this strategy.

Project Name	Citations and Adjudication Data Dictionaries					
Priority (select one: High, Medium, Low)		Medium				
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	State Court Administrative Office					
Project Description/Purpose	Obtain Data Dictionaries from Systems supporting Law Enforcement and Courts for Citations and Adjudication					
Partners	MSP, Local Law enforcement. Courts, Vendors that support each					
Performance Measure (select all that apply)		Accuracy	Completeness		Integration	
Website	N/A					
Project Director	Cody Gross					
Address	925 W. Ottawa, Lansing, MI 48909					
Phone	517-373-8777					
E-mail	grossc@courts.mi.gov					
Agency	State Court Administrative Office					
Impact/Results	Create a consideration or recommendation for Michigan to consider providing data dictionary documentation					
Start	10/1/2018					
End	9/30/2022					
Funding Source	TBD					
Cost	TBD					
Project Benchmarks	Documented recommendation for Michigan to proceed with data dictionary documentation.					

Recommendation: **3 of 3**
Improve the data quality control program for the Citation and Adjudication systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:
There is no set of established performance measures for the timeliness, accuracy, completeness, uniformity, integration and accessibility for both citation and adjudication systems.

Strategies:
Create an action plan that will detail the steps necessary to establish and implement performance measures as outlined and required in the Traffic Records Program Assessment Advisory

Accomplishments: (as of May 2018)
No action has been implemented thus far for this strategy.

Project Name	Citations and Adjudication Performance Measures					
Priority (select one: High, Medium, Low)		Medium				
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	State Court Administrative Office					
Project Description/Purpose	Performance Measures for Citation and Adjudication systems					
Partners	MSP, Local Law enforcement and Courts					
Performance Measure (select all that apply)		Accuracy	Completeness	Uniformity		
Website	N/A					
Project Director	Cody Gross					
Address	925 W. Ottawa, Lansing, MI 48909					
Phone	517-373-8777					
E-mail	grossc@courts.mi.gov					
Agency	State Court Administrative Office					
Impact/Results	Create a consideration or recommendation for Michigan to establishing and implementing performance measures for the citation/adjudication traffic records systems.					
Start	10/1/2018					
End	9/30/2022					
Funding Source	TBD					
Cost	TBD					
Project Benchmarks	Documented recommendation for Michigan to establish and implement performance measures for citation/adjudication traffic records systems					

VEHICLE

Recommendation: 1 of 2
Improve the applicable guidelines for the Vehicle data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:
The State of Michigan does not participate in the National Motor Vehicle Title Information System (MVTIS) real-time or Performance Registration System and Management (PRISM).

Strategies:
To consider becoming a NMVTIS real-time and PRISM participant.

Accomplishments: (as of May 2018):
The Michigan Department of State will be going real time with NMTIS with the implementation of our new IT system as we upgrade from the old legacy system. This implementation is targeted for February 2019. Exploring if PRISM will be a part of the legacy upgrade.

Project 1 Name	NMVTIS Real-Time					
Priority (select one: High, Medium, Low)						Low
Status: (select one: Proposed, Planned, Active, Completed)		Planned				
Lead Agency	Michigan Department of State					
Project Description/Purpose	Enable NMVTIS real-time (currently a batch process) to provide title brand information and stolen vehicle indicators (currently available through the Law Enforcement Information Network - LEIN) to other States, which will allow the system to be queried and data provided before the issuance of a new title.					
Partners	AAMVA, MSP, and DTMB					
Performance Measure (select all that apply)	Timeliness	Accuracy	Completeness	Uniformity	Integration	Accessibility
Website	N/A					
Project Director	John Harris					
Address	7064 Crowner Drive, Lansing, MI 48918					
Phone	517-322-1553					
E-mail	HarrisJ2@michigan.gov					
Agency	Michigan Department of State					
Impact/Results	Will provide for greater speed and accuracy of data.					
Start	10/1/2018					
End	9/30/2022					
Funding Source	Federal Grants					
Cost	Undetermined					
Project Benchmarks	Identify funding; Obtaining funding; Determine resources; Develop project plan; Testing; Implementation					

Project 2 Name	PRISM					
Priority (select one: High, Medium, Low)						Low
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	Michigan Department of State					
Project Description/Purpose	Become an active participant in the Performance Registration System and Management (PRISM) program, a Federal-State partnership that identifies motor carriers with deficient safety records and ties carrier safety to vehicle registration.					
Partners	AAMVA, MSP, and DTMB					
Performance Measure (select all that apply)	Timeliness	Accuracy	Completeness	Uniformity	Integration	Accessibility
Website	N/A					
Project Director	John Harris					
Address	7064 Crowner Drive, Lansing, MI 48918					
Phone	517-322-1553					
E-mail	HarrisJ2@michigan.gov					
Agency	Michigan Department of State					
Impact/Results	Will provide for greater speed and accuracy of data.					
Start	10/1/2018					
End	9/30/2022					
Funding Source	Federal Grants					
Cost	Undetermined					
Project Benchmarks	Identify funding; Obtaining funding; Determine resources; Develop project plan; Testing; Implementation					

Recommendation: **2 of 2**

*NOTE: This recommendation has been moved to the 'Completed Projects' section of the strategic plan.

DRIVER

Recommendation: 1 of 3
Improve the description and contents of the Driver data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:
The MDOS driver system has integrated data with the systems referenced below, but they are not real time – they are batch processes.

Strategies:
Plans are underway to review and determine the feasibility of enhancing the data integration in a multi-agency project

Accomplishments: (as of May 2018)
The Michigan Department of State is part of the Data Linkage project. On-going discussions and work.

Project Name	Update/Enhance Driver Data Systems Integration with Crash, Driving Under the Influence (DUI), and Citation Systems					
Priority (select one: High, Medium, Low)		Medium				
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	Michigan Department of State					
Project Description/Purpose	The driver data system ensures that each person licensed to drive has one identity, once license to drive, and one record. Custodial responsibility for the driver system resides in a single location, generally the State Department or Division of Motor Vehicles. The driver system maintains information on all out-of-State or unlicensed drivers convicted of traffic violations within the State's boundaries. The driver system maintains driver identities, histories, and licensing information for all records in the system. The driver system should be linked to the crash data system, the DUI data system, and the citation and adjudication systems (for both original charges and the final dispositions of all traffic citations).					
Partners	MSP, Courts, and DTMB					
Performance Measure (select all that apply)	Timeliness	Accuracy	Completeness	Uniformity	Integration	Accessibility
Website	N/A					
Project Director	John W. Harris					
Address	7064 Crowner Drive, Lansing, MI 48918					
Phone	517-322-1553					
E-mail	Harrisj2@michigan.gov					
Agency	Michigan Department of State					
Impact/Results	Integration will provide for greater speed and accuracy in analysis of data.					
Start	10/1/2018					
End	9/30/2022					
Funding Source	Grants					
Cost	Indeterminate now					
Project Benchmarks	TBD					

Recommendation: 2 of 3

Improve the interfaces with the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:

Report states that MDOS does not have the capability to grant law enforcement access to information in the driver system.

Strategies:

MDOS will review ways to better reflect that access is given to law enforcement.

Accomplishments: (as of May 2018)

MDOS internal staff are having an on-going review of access rights for law enforcement.

Project Name	Driver Data System Interfaces					
Priority (select one: High, Medium, Low)		Medium				
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	Michigan Department of State					
Project Description/Purpose	The driver system interfaces with other traffic records systems to enhance data quality and support the driver system's critical business processes. System interface describes a timely, seamless relationship and a high degree of interoperability between systems. Custodians of the driver system maintain the capability to grant authorized law enforcement, court, and other state users access to information within the driver system. Productive data integration between the driver system and other traffic records components are dependent upon explicitly defined linking variable that ensure more accurate and up-to-date information.					
Partners	MSP (Crash), Courts (Citation data), and DTMB					
Performance Measure (select all that apply)	Timeliness	Accuracy	Completeness	Uniformity	Integration	Accessibility
Website	N/A					
Project Director	John W. Harris					
Address	7064 Crowner Drive, Lansing, MI 48918					
Phone	517-322-1553					
E-mail	Harrisj2@michigan.gov					
Agency	Michigan Department of State					
Impact/Results	Improve the degree of inter-operability of the interfaces of driver, crash, and citation.					
Start	10/1/2018					
End	9/30/2022					
Funding Source	Grants					
Cost	Indeterminate now					
Project Benchmarks	TBD					

Recommendation: 3 of 3

Improve the data quality control program for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:

Undefined performance metrics that can be used by end users to overall record quality.
No data quality reports given to TRCC.

Strategies:

Review the Quality Control Measures and develop metrics that are useful to end users.
Develop reports that are useful to be given to TRCC.

Accomplishments: (as of May 2018)

The Michigan Department of State is generating more timely and complete error reports to the courts for resolution. Also enhanced training is being done with courts to promote more accurate and timely submission of data.

Project Name	Driver Data Quality Control Programs					
Priority (select one: High, Medium, Low)		Medium				
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	Michigan Department of State					
Project Description/Purpose	A formal, comprehensive driver data quality management program's review protocols cover the entire process—the collection, submission, processing, posting, and maintenance of driver data. Automated edit checks and validation rules that ensure entered data falls within the range of acceptable values and is logically consistent between other fields. Edit checks are applied when data is added to the record.					
Partners	MDOS Internal Users, MSP, MDOT, and DTMB					
Performance Measure (select all that apply)	Timeliness	Accuracy	Completeness	Uniformity		Accessibility
Website	N/A					
Project Director	John W. Harris					
Address	7064 Crowner Dr Lansing MI 48918					
Phone	517/322-1553					
E-mail	Harrisj2@michigan.gov					
Agency	Michigan Department of State					
Impact/Results	This will allow for better review of the accuracy and timeliness of the data sent to MDOS and shared with our record partners. It will determine benchmarks and allow for review based on those benchmarks.					
Start	10/1/2018					
End	9/30/2022					
Funding Source	Grants					
Cost	Indeterminate now					
Project Benchmarks	TBD					

INJURY SURVEILLANCE

Recommendation: 1 of 3

Improve the description and contents of the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:

Michigan's Injury Surveillance data systems do not currently incorporate critical databases, such as EMS data, Emergency Department data, Trauma Registry data, and Rehabilitation data.

Strategies:

Work to incorporate these data sets into Michigan's overall Injury Surveillance data system

Accomplishments: (as of May 2018)

No action has been implemented thus far for this strategy.

Project Name	Injury Surveillance Data Sets Improvement					
Priority (select one: High, Medium, Low)			Medium			
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	MDHHS – EMS Office					
Project Description/Purpose	Develop a plan to improve descriptions and contents of Injury Surveillance traffic records data systems					
Partners	MDHHS, WMU, & MHA					
Performance Measure (select all that apply)			Completeness		Integration	Accessibility
Website	N/A					
Project Director	Sabrina Slee					
Address	1001 Terminal Road, Lansing, MI 48906					
Phone	517-241-3024					
E-mail	slees@michigan.gov					
Agency	Michigan Department of Health and Human Services					
Impact/Results	More complete and accessible injury surveillance traffic records data system					
Start	10/1/2018					
End	9/30/2022					
Funding Source	TBD					
Cost	TBD					
Project Benchmarks	The number of injury surveillance data systems with improved descriptions and contents.					

Recommendation: **2 of 3**
Improve the interfaces with the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:
There is no interface between the various components of the Injury Surveillance system or with the traffic records systems.

Strategies:
Work with TRCC Data Integration Workgroup to develop interfaces between the traffic records and Injury Surveillance systems

Accomplishments: (as of May 2018)
The TRCC Data Integration Project started in April of 2017 and the EMS/Trauma system is included in the project scope. Efforts are underway to developed and/or enhance integration between the various traffic records databases.

Project Name	Injury Surveillance Systems Data Integration					
Priority (select one: High, Medium, Low)		Medium				
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	MSP					
Project Description/Purpose	Work to integrate the Injury Surveillance system databases with the traffic records databases.					
Partners	MSP & MDHHS					
Performance Measure (select all that apply)			Completeness		Integration	Accessibility
Website						
Project Director	Jessica Riley					
Address	7150 Harris Drive, Dimondale, MI 48821					
Phone	517-284-3112					
E-mail	rileyj9@michigan.gov					
Agency	OHSP					
Impact/Results	Improved integration of injury surveillance databases and traffic records databases					
Start	10/1/2018					
End	9/30/2022					
Funding Source	TBD					
Cost	TBD					
Project Benchmarks	The number of injury surveillance systems integrated with traffic records systems					

Recommendation: 3 of 3

Improve the data quality control program for the Injury Surveillance systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:

Quality control reviews may be performed at the local or regional level but there are no standard procedures in place for this process.

Strategies:

Develop a plan to improve and standardize injury surveillance systems' data quality control at the local, regional, and state levels

Accomplishments: (as of May 2018)

No action has been implemented thus far for this strategy.

Project Name	Injury Surveillance Data Quality Improvement					
Priority (select one: High, Medium, Low)		Medium				
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	MDHHS					
Project Description/Purpose	Develop a plan to improve and standardize injury surveillance systems' data quality control at the local, regional, and state levels					
Partners	MDHHS, MHA, MCA					
Performance Measure (select all that apply)	Timeliness	Accuracy	Completeness	Uniformity	Integration	Accessibility
Website						
Project Director	Sabrina Slee					
Address	1001 Terminal Road, Lansing, MI 48906					
Phone	517-241-3024					
E-mail	slees@michigan.gov					
Agency	Michigan Department of Health and Human Services					
Impact/Results	Increased Injury Surveillance systems with established data quality control performance measures					
Start	10/1/2018					
End	9/30/2022					
Funding Source	TBD					
Cost	TBD					
Project Benchmarks	The number of established Injury Surveillance system performance measures					

ROADWAY

Recommendation: 1 of 2

Improve the applicable guidelines for the Roadway data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:

There is not currently a formal set of guidelines for the collection of roadway data that reflects the elements in the Model Inventory of Roadway Elements (MIRE) or MIRE Fundamental Data Elements (FDE) for all public roads.

Strategies:

The original intent was to create awareness with the Transportation Asset Management Council (TAMC) of the importance and benefits of the collection of MIRE on all public roads, the FDE. The TAMC did not act and MDOT will lead in this process.

The integration, accessibility, and usability of roadway MIRE FDE data for meaningful crash analysis will be accomplished by implementing Geographic Information Technologies (GIT). MDOT will lead in the selection and implementation of GIT and will provide access to all road agencies for their use. The GIT will allow for future roadway data storage, exchange of, and utilization of MIRE FDE data collected by our partners and the State of Michigan. MDOT will collaborate statewide with our partners to encourage participation.

Accomplishments: (as of May 2016)

At the November 18, 2015 Data Committee Meeting for the TAMC a presentation was given by Michigan's Local Agency Technical Assistance Program (LTAP) on using Roadsoft for FDE collection. Roadsoft is a graphically designed, integrated roadway management system developed for Michigan's local agency engineers and managers to use in the analysis and reporting of roadway inventory, safety, and conditional data. The presentation provided the committee the following:

What are the FDEs?
What are the proposed Federal rules?
What data elements can be loaded into Roadsoft today? (32 of 37)
How Roadsoft can be used in the process of collecting the required data?
    Office data collection
    Field data collection
What are the unique differences between FDEs and Roadsoft attributes?

On March 15, 2016, FDE requirements were published in the Federal Register. These requirements are:

- States shall incorporate specific quantifiable and measurable anticipated improvements for the collection of MIRE fundamental data elements into their Traffic Records Strategic Plan by July 1, 2017.
- States shall have access to a complete collection of the MIRE fundamental data elements on all public roads by September 30, 2026.

In response MDOT submitted a proposed project in April 2016 as part of the FY2017 Traffic Records Call for Projects. The project titled, Roadsoft Model Inventory of Roadway Elements (MIRE) Modifications, calls to modify Roadsoft to add or modify the following fields to be fully MIRE-FDE compliant:

- Type of Government Ownership (4) – Automate value fill with options
- Route Number (8) - Add
- Direction of Inventory (18) - Add
- Access Control (22) - Add
- Surface Type (23) – Automate value fill based on current value and add options
- Median Type (54) - Add
- One/Two-Way Operations (91) - Add
- Unique Approach Identifier (139) –Automate value fill based on leg direction
- Intersection/Junction Traffic Control (131)– Add options and retain legacy field
- Intersection/Junction Geometry (126) – Automate value fill based on map line work
- A few additional MIRE fields that are user attributed rather than automated.

TAMC is investigating the feasibility for providing guidance and tools to local agencies in MIRE FDE collection. TAMC will be conducting a MIRE FDE road survey and may conduct a pilot MIRE FDE collection study. If a tool is available for collection on MIRE FDE, TAMC may be more likely to support future MIRE FDE collection. This proposed project combines the resources of MDOT, TAMC and Michigan Tech University, while taking advantage of the existing investment that has already been made in Roadsoft.

Accomplishments: (as of May 2018)

The above MIRE FDE elements were added to the Roadsoft asset management software used by local agencies. The project was completed by September 30, 2017.

This next project will combine the resources of the state and its partners, while taking advantage of the existing investment that has already been made in Roadsoft. As a continuation to the above projects, MDOT submitted a three-year proposal as part of the FY2018 Traffic Records Call for Projects to upgrade Roadsoft and the ESRI Roads & Highways software package to store and manage statewide MIRE FDE data. Hereafter referred to as Geographic Information Technology (GIT). Integration, accessibility, and usability of roadway MIRE FDE data for meaningful crash analysis are the main goals of this project. Implementation of this effort will allow for future roadway data storage, exchange of, and utilization of this data by local agencies, regional organizations, metro planning organizations and the State of Michigan.

The implementation of the MDOT GIT is currently behind schedule, but progressing and is scheduled to complete by the end of 2018. Once MDOT has its GIT stood up, it can commence on the statewide MIRE FDE data integration project. MDOT has reached out to its local partners through several MDOT Target Coordination Meetings. These meetings are coordinated by the state with its local partners like the Metropolitan Planning Organizations on how we as a state will meet the MAP-21 Transportation Performance Measures such as MIRE FDE.

Project Name	MIRE Data Collection					
Priority (select one: High, Medium, Low)	High					
Status: (select one: Proposed, Planned, Active, Completed)			Active			
Lead Agency	Michigan Department of Transportation (Traffic and Safety)					
Project Description/Purpose	MIRE and MIRE FDE awareness					
Partners	TAMC, DTMB, LTAP (Roadsoft), ESRI, DTSgis, MPO's, RPO's, and local road agencies.					
Performance Measure (select all that apply)					Integration	Accessibility
Website	TAMC http://tamc.mcgi.state.mi.us/MITRP/Council/Default_Council.aspx MIRE http://www.mireinfo.org/about.html					
Project Director	Mark Bott					
Address	425 W. Ottawa St.					
Phone	517-335-2625					
E-mail	bottm@michigan.gov					
Agency	Michigan Department of Transportation					
Impact/Results	FDE will be identified by the TAMC as being critical assets management data elements to be reported as collected data.					
Start	10/01/2018					
End	9/30/2026					
Funding Source	N/A					
Cost	N/A					
Project Benchmarks	Complete the MDOT GIT to transmit data collected in Roadsoft from local agencies to MDOT and vice versa. After the MDOT GIT is set up, fill 20 percent of the initial data gap each year over public roads until complete.					

Recommendation: 2 of 2

Improve the data quality control program for the Roadway data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:

There is not currently a formal process for quality control on the back-end of the roadway data system.

Strategies:

Collaborate with statewide partners and lead discussion on determining necessary metrics on performance measures and how to collect and achieve the values regarding data errors, data sharing, timeliness, accuracy, completeness, uniformity, integration and accessibility of available information.

Accomplishments: (as of May 2018)

The accomplishments of this recommendation are contingent on MDOT implementing the GIT of Roadway Recommendation 1 of 2. The Center for Shared Solutions (CSS), division of State of Michigan's DTMB has been approached with the need to coordinate and track edit requests using the MDOT GIT and CSS GIT.

Project Name	Michigan Statewide Roadway Data Performance Measures					
Priority (select one: High, Medium, Low)	High					
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	Michigan Department of Transportation					
Project Description/Purpose	Work with data partners to determine and develop performance measures and processes for measuring data errors, data sharing, timeliness, accuracy, completeness, uniformity, integration and accessibility of available information.					
Partners	TMB, DTMB(CSS), LTAP (Roadsoft), TAMP, TAMS, TDMS, MSP, MPO's, RPO's, and local road agencies.					
Performance Measure (select all that apply)	Timeliness	Accuracy	Completeness	Uniformity	Integration	Accessibility
Website	http://www.michigan.gov/mdot/					
Project Director	Mark Bott					
Address	425 W. Ottawa St.					
Phone	517-335-2625					
E-mail	bottm@michigan.gov					
Agency	Michigan Department of Transportation					
Impact/Results	Development and use of performance measures will allow each agency to be able to set goals to address needs respectively.					
Start	10/1/2018					
End	9/30/2022					
Funding Source	N/A					
Cost	TBD					
Project Benchmarks	Produce a formal quality report on Trunkline Freeways – *Short-Term Benchmark* Produce a formal quality report on Trunkline Urban Routes – *Short/Mid-Term Benchmark* Produce a formal quality report on Trunkline Rural Routes – *Mid-Term Benchmark*					

	Produce a formal quality report on Federal-Aid Roads- *Mid/Long-Term Benchmark* Produce a formal quality report on all public roads- *Long-Term Benchmark*

DATA USE & INTEGRATION

Recommendation: 1 of 1
Improve the traffic records systems capacity to integrate data that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:
There is limited integration amongst the various traffic records databases

Strategies:
Establish a Data Integration system between the various TRCC traffic records databases

Accomplishments: (as of May 2018)
The TRCC Data Integration Project began in April of 2017. To date the following has been completed:
Waves Started:
Wave 1 - Breathalyzer Person, Officer, Arrests (Tests): Start Date 1/22/2018
Wave 1 - Crash - Vehicles and Officer: Start Date 1/29/2018
Wave 1 - eDaily Vehicle and Officer: Start Date 02/19/2018
Wave 2 - DRIVER / VEHICLE, GDL, EMS NEMSIS, SNAP: Start Date 02/22/2018
Wave 3 - COURTS - JIS/JDW and Car Seats: Start Date 4/07/2018 (beginning initial load and profiling)
Production Cut-Over (Select): 03/06/2018
Major Activity:
Test Cases Developed: eDaily (131), MICR (176), Crash (159), Breathalyzer (64)
Test Cases Executed: eDaily (131), MICR (150), Crash (159), Breathalyzer (64)

Project Name	Traffic Records Data Integration					
Priority (select one: High, Medium, Low)	High					
Status: (select one: Proposed, Planned, Active, Completed)			Active			
Lead Agency	MSP-CJIC					
Project Description/Purpose	To develop linked datasets including merged data for crashes and injury surveillance information, and merged data for crashes and citations, from Michigan's 2015 National Highway Traffic Safety Administration (NHTSA) Traffic Records Assessment recommendations.					
Partners	MSP, MDOS, MDOT, SCAO, MDHHS, DTMB					
Performance Measure (select all that apply)			Completeness		Integration	Accessibility
Website	N/A					
Project Director	Deepinder Uppal					
Address	7150 Harris Drive, Dimondale, MI 48821					
Phone	517-599-4887					
E-mail	uppald@michigan.gov					
Agency	Michigan State Police- Criminal Justice Information Center (MSP-CJIC)					
Impact/Results	Access to linked traffic records databases for problem identification and countermeasure development					
Start	4/01/2017					

End	9/30/2022
Funding Source	NHTSA 405-c funding
Cost	$2,950,000 to date
Project Benchmarks	

TRCC

Consideration: 1 of 5

Have a readily-available list of potential projects to facilitate the use of or application for awards of grants that involve databases which make up the traffic records system

Deficiency Identified:

Limiting the project list to only grant funded projects decreases the TRCC's focus on the overall goals of the TRCC Strategic Plan

Strategies:

Develop and update annually a list of all recommended projects identified in the TRCC Strategic Plan

Accomplishments (as of May 2018):

The 'Accomplishments' section of this strategic plan provides the annual updates for the various identified strategies in each section of the plan.

Project Name	TRCC Strategic Plan Comprehensive Project List					
Priority (select one: High, Medium, Low)	High					
Status: (select one: Proposed, Planned, Active, Completed)			Active			
Lead Agency	OHSP					
Project Description/Purpose	Develop and update annually a list of all recommended projects identified in the TRCC Strategic Plan					
Partners	MSP – OHSP & CJIC, MDHHS, MDOT, MDOS, MDTMB, & SCAO					
Performance Measure	Timeliness	Accuracy	Completeness	Uniformity	Integration	Accessibility
Website	http://www.michigan.gov/msp/0,1607,7-123-1593_3504_41646-145631--,00.html					
Project Director	Jessica Riley					
Address	7150 Harris Drive, Dimondale, MI 48821					
Phone	517-284-3112					
E-mail	rileyj9@michigan.gov					
Agency	Office of Highway Safety Planning					
Impact/Results	The TRCC would be able to broaden its focus to the overall TRCC Strategic Plan recommendations					
Start	On-going					
End	On-going					
Funding Source	NHTSA Section 405-c funding					
Cost	Varied based on funding availability and project funding needs					
Project Benchmarks	Increase TRCC's ability to quickly identify ready projects when resources become available					

Consideration: 2 of 5

Michigan should continue to focus on a comprehensive Traffic Records Inventory

Deficiency Identified:

Michigan does not currently have a comprehensive Traffic Records Inventory

Strategies:

Develop a comprehensive Traffic Records Inventory as part of the Data Integration Project

Accomplishments (as of May 2018):

The Data Integration project began in April of 2017 and we have begun to incorporate this consideration within that project with comprehensive data sets, data dictionaries, and cross agency Traffic Record applications.

Project Name	Traffic Records Inventory					
Priority (select one: High, Medium, Low)			Medium			
Status: (select one: Proposed, Planned, Active, Completed)				Active		
Lead Agency	OHSP					
Project Description/Purpose	Develop a comprehensive Traffic Records Inventory as part of the Data Integration Project					
Partners	MSP – OHSP & CJIC, MDHHS, MDOT, MDOS, MDTMB, & SCAO					
Performance Measure			Completeness		Integration	
Website	http://www.michigan.gov/msp/0,1607,7-123-1593_3504_41646-145631--,00.html					
Project Director	Jessica Riley					
Address	7150 Harris Drive, Dimondale, MI 48821					
Phone	517-284-3112					
E-mail	rileyj9@michigan.gov					
Agency	Office of Highway Safety Planning					
Impact/Results	A Traffic Records Inventory would provide full knowledge and understanding of the data, its uses, the circumstances of its collections and its accessibility which encourages interactions between data analysts and users from various agencies					
Start	10/1/2018					
End	9/30/2022					
Funding Source	NHTSA Section 405-c funding					
Cost	TBD – should be absorbed within the costs of the Data Integration Project					
Project Benchmarks	The number of agencies with data incorporated into the Traffic Records Inventory					

Consideration: 3 of 5

Representatives from all aspects of the Injury Surveillance System (ISS) should be included on the TRCC

Deficiency Identified:

The entire ISS is represented by only one of the five involved systems – Emergency Medical Services

Strategies:

Representatives for the emergency department, trauma registry, hospital discharge, rehabilitation, and vital records, if necessary will be invited to become a member of the TRCC technical committee

Accomplishments (as of May 2018):

We have invited a subject matter expert from the Injury Prevention area to the TRCC meetings, to date she has been unable to attend.

Project Name	Injury Surveillance System Representation on the TRCC					
Priority (select one: High, Medium, Low)		Medium				
Status: (select one: Proposed, Planned, Active, Completed)		Planned				
Lead Agency	OHSP					
Project Description/Purpose	Incorporation additional Injury Surveillance System staff on the TRCC to garner support for the optimal collection and use of data					
Partners	MDHHS & Michigan Health & Hospital Association (MHA)					
Performance Measure			Completeness		Integration	
Website	www.michigan.gov/ohsp					
Project Director	Jessica Riley					
Address	7150 Harris Drive, Dimondale, MI 48821					
Phone	517-284-3112					
E-mail	rileyj9@michigan.gov					
Agency	Office of Highway Safety Planning					
Impact/Results	Gain support for optimal collection and use of injury surveillance system data					
Start	10/1/2018					
End	9/30/2022					
Funding Source	N/A					
Cost	N/A					
Project Benchmarks	The number of ISS agencies involved in the TRCC					

Consideration: 4 of 5

Conduct a training needs assessment to ascertain any aspect of the Traffic Records System for which TRCC members feel they need additional training

Deficiency Identified:

There does not seem to be a TRCC focus beyond crash data training

Strategies:

Conduct an assessment on the Traffic Records System training needs of the TRCC

Accomplishments (as of May 2018):

A NHTSA GO Team is currently working with Michigan to develop a training to assist with the following:

- Identify existing performance measures for the traffic records systems
- Provide a training workshop to State identified TRCC members
- Create new examples of performance measures for each traffic records core system

The goal of this GO Team project is to provide the State with a training workshop that will help the State identify performance measures that will help achieve the goals set within their traffic records strategic plan. The work plan has been solidified and the training is scheduled for June 18, 2018.

Project Name	TRCC Traffic Records System Training Needs Assessment					
Priority (select one: High, Medium, Low)						Low
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	OHSP					
Project Description/Purpose	Conduct an assessment on the Traffic Records System training needs of the TRCC					
Partners	MSP – OHSP & CJIC, MDHHS, MDOT, MDOS, MDTMB, & SCAO					
Performance Measure	Timeliness	Accuracy	Completeness			Accessibility
Website	www.michigan.gov/ohsp					
Project Director	Jessica Riley					
Address	7150 Harris Drive, Dimondale, MI 48821					
Phone	517-284-3112					
E-mail	rileyj9@michigan.gov					
Agency	Office of Highway Safety Planning					
Impact/Results						
Start	10/1/2018					
End	9/30/2022					
Funding Source	TBD					
Cost	TBD					
Project Benchmarks	The Traffic Records System trainings provided based on the results of the TRCC training assessment					

Consideration: 5 of 5

Ensure all components of the Traffic Records System establish performance measures

Deficiency Identified:

Performance measures do not currently exist for every data attribute (timeliness, accuracy, completeness, uniformity, integration, and accessibility) in every Traffic Records System

Strategies:

Assist each TRCC agency with establishing performance measures for each data attribute

Accomplishments: (as of May 2018)

A NHTSA GO Team is to provide the State with a training workshop that will help the State identify performance measures that will help achieve the goals set within their traffic records strategic plan. The work plan has been solidified and the training is scheduled for June 18, 2018. After completion of the training, the TRCC will work to update the Strategic Plan with the new skills learned.

Project Name	Traffic Records System Performance Measures Development					
Priority (select one: High, Medium, Low)	High					
Status: (select one: Proposed, Planned, Active, Completed)	Proposed					
Lead Agency	OHSP					
Project Description/Purpose	Establish traffic records data attribute performance measures for each TRCC agency					
Partners	MSP – OHSP & CJIC, MDHHS, MDOT, MDOS, MDTMB, & SCAO					
Performance Measure	Timeliness	Accuracy	Completeness	Uniformity	Integration	Accessibility
Website	www.michigan.gov/ohsp					
Project Director	Jessica Riley					
Address	7150 Harris Drive, Dimondale, MI 48821					
Phone	517-284-3112					
E-mail	rileyj9@michigan.gov					
Agency	Office of Highway Safety Planning					
Impact/Results	Ensures data quality and focus on data improvements by setting goals which demonstrate effects of projects, legislation, and policy shifts, as well as provide justification for funding, legislative, and staffing needs					
Start	10/1/2018					
End	9/30/2022					
Funding Source	TBD					
Cost	TBD					
Project Benchmarks	The number of performance measures established and actively measured by each TRCC agency					

STRATEGIC PLANNING

Consideration: 1 of 2

Establish a separate section within the TRCC Strategic Plan for completed projects for historical purposes

Deficiency Identified:

All projects (proposed, planned, active, and completed) are intertwined in the TRCC Strategic Plan which makes it difficult to monitor only active projects

Strategies:

Develop a section near the end of the strategic plan where completed projects will be placed

Accomplishments (as of May 2018):

A 'Completed Projects' section has been added to the TRCC Strategic Plan

Project Name	TRCC Strategic Plan Completed Projects			
Priority (select one: High, Medium, Low)				Low
Status: (select one: Proposed, Planned, Active, Completed)		Planned		
Lead Agency	OHSP			
Project Description/Purpose	Develop a section near the end of the strategic plan where completed projects will be placed			
Partners	MSP – OHSP & CJIC, MDHHS, MDOT, MDOS, MDTMB, & SCAO			
Performance Measure			Completeness	
Website	http://www.michigan.gov/msp/0,1607,7-123-1593_3504_41646-145631--,00.html			
Project Director	Jessica Riley			
Address	7150 Harris Drive, Dimondale, MI 48821			
Phone	517-284-3112			
E-mail	rileyj9@michigan.gov			
Agency	Office of Highway Safety Planning			
Impact/Results	Completed projects can be viewed more easily for historical purposes			
Start	10/1/2018			
End	9/30/2022			
Funding Source	N/A			
Cost	N/A			
Project Benchmarks	The number of completed projects moved to this section of the TRCC Strategic Plan			

Consideration: 2 of 2

Create a matrix of performance measures for each TRCC Strategic Plan project

Deficiency Identified:

There is not a centralized location to view the performance measures of the various TRCC Strategic Plan projects

Strategies:

Develop a comprehensive performance measures matrix for the TRCC Strategic Plan projects

Accomplishments (as of May 2018):

No action has been implemented thus far for this strategy.

Project Name	TRCC Strategic Plan Performance Measures Matrix			
Priority (select one: High, Medium, Low)				Low
Status: (select one: Proposed, Planned, Active, Completed)		Planned		
Lead Agency	OHSP			
Project Description/Purpose	Develop a comprehensive performance measures matrix for the TRCC Strategic Plan projects			
Partners	MSP – OHSP & CJIC, MDHHS, MDOT, MDOS, MDTMB, & SCAO			
Performance Measure			Completeness / Uniformity	
Website	http://www.michigan.gov/msp/0,1607,7-123-1593_3504_41646-145631--,00.html			
Project Director	Jessica Riley			
Address	7150 Harris Drive, Dimondale, MI 48821			
Phone	517-284-3112			
E-mail	rileyj9@michigan.gov			
Agency	Office of Highway Safety Planning			
Impact/Results	Performance measures matrix can readily show outcomes expected and measures to gauge the success			
Start	10/1/2018			
End	9/30/2022			
Funding Source	N/A			
Cost	N/A			
Project Benchmarks	The number of performance measures included in the matrix for each TRCC Strategic Plan project			

FY2018 Traffic Records Priority Projects

Project Name	Area	Funding Amount	Priority
Michigan Traffic Crash Facts	Crash and Roadway	$770,000	
Improving the completeness of pedestrian and bicycle exposure data in Michigan	Crash and Roadway	$100,000	
Text Mining to Extract New Variables & Build on Existing Foundations for Text-Based Quality Control	Crash	$60,515	
Upgrades to Roadsoft and ESRI Roads & Highways to store and manage statewide MIRE data	Roadway and TRCC	$90,000	
Institute of Police Technology and Management (IPTM) Regional Training	MISC	$160,000	
Global Positioning for Enhanced Traffic Crash Reconstruction	Crash	$210,000	
Michigan Traffic Crash Data and Information (Brochure)	MISC	$5,000: This is not paid for with TRCC money.	
UD-10 Training Support & CLIP 2.0	Crash	$429,000	
Data Integration	ALL	$1,900,000	
TOTAL	405 (c)	**$3,719,515**	
	Other	**$5,000**	

Project Title:

Michigan Traffic Crash Facts (MTCF)

Which emphasis area will this project address?
(i.e. Crash, Citation, Vehicle/Driver, EMS & Trauma Data, Roadway, TRCC, or MISC)

Crash and Roadway

Which traffic records data attribute(s) will this project improve?
(i.e. timeliness, accuracy, completeness, uniformity, integration, and accessibility)

Accuracy, Accessibility, and Completeness

Background/Problem Statement:

Michigan Traffic Crash Facts is a crash data website that currently contains historical data in the publications section of the website that dates to 1992. In addition to this historical information, the University of Michigan Transportation Research Institute has paper copies of "Michigan Traffic Accident Facts" that date back to 1952. To preserve the paper copies and make them available to the public, we propose to have the additional publication years added to the website.

Traffic safety individuals and agencies need access to traffic crash data to identify and analyze problems, implement countermeasures, and evaluate impact to improve safety on Michigan roadways. OHSP has been producing traffic crash facts (TCF) since the 1970's. Up until 2003, TCF was produced in a paper report and later in a CD version. Starting in 2004, TCF was produced and distributed via the website, greatly improving the accessibility of the data.

The Michigan Traffic Crash Facts Web site http://www.michigantrafficcrashfacts.org, updated annually, provides comprehensive traffic crash data.

A data query tool was developed in 2006 to generate individualized reports and mapping capabilities. From FY15 through FY17, UMTRI has worked on additional website enhancements including redesigning the website to be mobile-friendly and designing a road segment filter. Recently an increasing number of user requests have been made for the ability to perform a Top 10 ranking using the query tool. Currently, the most frequent user request is for a Top 10 ranking of intersections with the highest crash rate in each area.

Impact Statement (What will happen if funding is not provided for this program? How will it improve the above traffic records data attribute?)

Traffic crash data for public use is essential to the traffic safety community to accurately identify traffic safety issues and effectively program limited traffic safety dollars for maximum impact. Failure to provide this information would severely limit the ability of Michigan's traffic safety community in conducting ongoing analysis and would reduce Michigan's eligibility to qualify for future federal traffic records funding.

Without the funding for this project, the public cannot easily access historical Michigan crash data. Few paper copies currently exist for each publication year prior to 1992. At this point, UMTRI may even be the sole owner of some of the publications. If this is true, interested parties would need to physically come to Ann Arbor, MI to view the historical data. There is currently a small section of the MTCF website devoted to historical crash counts, but these publications provide much more detail and break down crashes into more specific categories. The publications also contain information for motor vehicle registrations and vehicle miles traveled. By examining these publications, anyone will be able to view the evolution of MTCF over time.

How will this strategy be achieved?

The Michigan Traffic Crash Facts (MTCF) will be provided to users statewide. The 2016 MTCF will be produced and posted at: **www.michigantrafficcrashfacts.org** . Enhancements and improvements to the data query tool will continue to be implemented.

The Michigan Traffic Crash Facts website and the additional ability to perform query tool rankings will be provided to users statewide at https://MichiganTrafficCrashFacts.org. In addition to the basic concept of performing query tool rankings based on 'crash counts' and 'crash rates' (1a.), we propose to include:
1b. Consideration of the annual average daily traffic (AADT) for the area of interest
1c. A heat map output option for the resulting ranking
1d. Companion publications uploaded to the MTCF website for rankings of interest

OHSP will continue to work with UMTRI staff to provide technical assistance on various requests for crash data analysis and presentations.

There are publications from 1952 to 1991 called "Michigan Traffic Accident Facts" that are not currently on the website. There are also "MSP Alcohol-Related Fatal Accident" studies (1974-1991) that it looks like were combined with "Michigan Traffic Accident Facts" in later years and "Michigan School Bus Accidents" (1971, 1977, and 1978) that were combined in later years. These separate sections became a part of the current Michigan Traffic Crash Facts over time and are included on the MTCF website for the current years available. It is possible that more publications that relate to Michigan Traffic Crash Facts can be located and included during the duration of this project.

The MTCF Historical Preservation Project would require a small archival team to scan and appropriately format the historical publications. The paper books are not in a standard size format, so they would be increased to the appropriate size to match existing documents on the site. The scanned files would then be converted and placed on the MTCF website for easy download by any user. If data is missing for any year, warnings can be added to the website to explain the reason

Is this strategy part of the TRCC Strategic Plan?

This project is not specifically stated as one of the strategies within the TRCC Strategic Plan. However, the project assists in providing the data foundation necessary to assist Michigan traffic safety partners in determining effectiveness of program countermeasures

selected to address various traffic safety issues statewide, regionally, countrywide, and locally.

What performance measure will be used to evaluate the effectiveness of this strategy?

Metrics of the Michigan Traffic Crash Facts website traffic are collected continuously and reported quarterly. A unique metric tracking the use of the ranking option will be implemented and included in the quarterly reports. In addition, a survey to gauge the effectiveness of the website will be conducted during the fiscal year.

An annual survey will be used to gauge the effectiveness of the website as well as trainings, presentations, and quarterly metrics.

Traffic to the website pages can be monitored to determine the usage of the historical publications and tutorial videos can be created to walk users through understanding the historical data presented as questions about the publications are received.

Requested Funding Amount: (provide budget breakdown – personnel; contractual costs; supplies/operating; equipment; and indirect costs, etc.…)

The funding recommendation is (rounded) to support this project activity, as follows:
Total of: **$700,000**

$153,705 is requested to support the implementation of query tool rankings on the Michigan Traffic Crash Facts website

The requested funding amount is **$21,943** to support personnel working on the archival project.

$200,863 to support the 2016 crash data analysis and website updates
$131,621 to support UMTRI's technical assistance positions
$183,697 for 55% (56% effective 7/1/18) indirect cost rate
Requested funding for MTCF technical assistance **$516,181**

Please Note:
- These figures include IDC at a rate of 55% through 6/30/18 and effective 7/1/18 the IDC rate increases to 56%.
- This budget accommodates additional reporting requirements (multiple crash maps and an individual summary (e.g. bullet point analysis) of every individual Post profile and every individual District profile, and updates to the 7 in-depth analysis reports; resources needed to update the query tool when we receive new data to accommodate new website structures (e.g. Framework, etc.); as well as faculty and staff pay rate increases.

Contact person for this project (name, agency, phone, email)

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Project Title:

Improving the completeness of pedestrian and bicycle exposure data in Michigan

Which emphasis area will this project address?
(i.e. Crash, Citation, Vehicle/Driver, EMS & Trauma Data, Roadway, TRCC, or MISC)

Roadway

Which traffic records data attribute(s) will this project improve?
(i.e. timeliness, accuracy, completeness, uniformity, integration, and accessibility)

Accuracy, Completeness, Integration

Background/Problem Statement:

In Michigan, there was a 57 percent increase in bicyclist fatalities from 2014 to 2015 and a 13% increase in pedestrian fatalities over the same time. To prioritize effective countermeasures, traffic safety analysis often requires pedestrian and/or bicyclist exposure counts to quantify expected reductions in crash risk. However, these exposure data are currently not completed for all road segments in Michigan. The Model Inventory of Roadway Elements (MIRE) identifies the following pedestrian and bike roadway elements: total daily two-way pedestrian count/exposure and bicycle count/exposure (numbers 85 and 86, respectively, under section on segment traffic flow data), and crossing pedestrian count/exposure (number 160 under section on at grade intersection/junction descriptors). However, the challenge for Michigan, as noted above, is that data for estimating these elements are not complete.

Impact Statement (What will happen if funding is not provided for this program? How will it improve the above traffic records data attribute?)

Pedestrian and bike exposure counts are critical aspects of calculating crash risk. These data enable the determination of priorities areas and potential emerging safety issues. Failure to provide this information would greatly diminish Michigan's ability to identify, analyze, and implement risk-based countermeasure for bicycle and pedestrian crashes.

How will this strategy be achieved?

(1) Estimate the MIRE Federal Data Elements as noted above (85, 86, 160) based on the statewide travel survey MI Counts.
(2) Validate the results with manual counts throughout the state.

Currently they have a MDOT funded project, "Pedestrian and Bicycle Safety Models, Michigan Department of Transportation" and FHWA funded project "Pedestrian and Bike Scalable Risk Assessment Methodology" develop the methods to estimate exposure from MI Counts. We will apply these methods to estimating the MIRE FDE elements of interest.

Key performance metrics include the number of road segments with estimated pedestrian exposure counts (85), number of road segments with estimated bike counts (86) and number of intersections with pedestrian crossing counts (160).

Is this strategy part of the TRCC Strategic Plan?

This project supports the goal of completeness of roadway data and MIRE-FDE compliance. These exposure data enable the development and determination of priorities and programming based on critical data analysis and potential emerging safety issues. Additionally, the exposure data records are baseline data to determine the current "Crash Picture" for the state

What performance measure will be used to evaluate the effectiveness of this strategy?

Task 1 requires dedicated computing resources to estimate exposure using the statewide travel survey. This includes running computationally intensive algorithms using ArcGIS and/or Python. Task 2 requires validation of the pedestrian and bicycle counts. We expect this to involve traveling to locations throughout the state to conduct manual counts.

Requested Funding Amount: (provide budget breakdown – personnel; contractual costs; supplies/operating; equipment; and indirect costs, etc.…)
The $100,000 breaks out into the following costs:

- Staffing (including sick/vacation/holiday/fringe): $61,300
- Computer: $2,000
- Travel: $1,000
- Indirect Costs (55%): $35,400

The UMTRI indirect cost rate increases on 7/1/18 from 55% to 56%.

Contact person for this project (name, agency, phone, email)
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Project Title:

Text Mining to Extract New Variables and Build on Existing Foundations for Text-Based Quality Control

Which emphasis area will this project address?
(i.e. Crash, Citation, Vehicle/Driver, EMS & Trauma Data, Roadway, TRCC, or MISC)

Crash

Which traffic records data attribute(s) will this project improve?
(i.e. timeliness, accuracy, completeness, uniformity, integration, and accessibility)

Accuracy, Completeness, Integration, Uniformity

Background/Problem Statement:

Crash narratives on the UD-10 represent an underused source of information about crashes. Because the text must be read by a human to be fully understood, only a small fraction of the 300,000+ narratives available annually in Michigan can be read for data coding purposes.
In the last decade or so, text mining methods have become better developed and are now being used in a variety of contexts. These methods might prove useful in extracting certain kinds of information from UD-10 narratives to add value to the existing crash dataset.
We also note that CJIC has begun a process of comparing the presence of certain words in the narrative to entries on the UD-10 that would indicate quality control errors. Text mining algorithms might be able to identify additional quality-control flags to add to the ones already developed.
In this proposal, we describe a project to apply text-mining methods to UD-10 narratives with two goals: 1) To extract new data elements (or supporting data elements), and 2) To explore the utility of text mining algorithms to flag items for quality control review.

Impact Statement (What will happen if funding is not provided for this program? How will it improve the above traffic records data attribute?)

Without the text mining algorithms, the matching of text boxes to static data boxes would be left to be caught by visual checking, which is a lengthy process that cannot be applied to all UD-10s.

How will this strategy be achieved?

Text mining methods include relatively simple approaches such as word frequency counts and word presence/absence as well as more complex approaches such as Probabilistic Topic Modeling (PTM; Blei, et al., 2003). PTM identifies groups of words that tend to co-occur, defines these as "topics," and assigns a measure of association between each narrative and each "topic."

In general, text mining cannot yet replace human readers of text, but certain characteristics of text might provide a good indication of the presence of certain kinds of

key information in a narrative. For example, if the word "deer" is present in a narrative, it is likely that the crash involved a deer. The converse may not be true—the absence of "deer" may not indicate that a crash is not a deer crash. Thus, the relationship between specific words and specific crash types may not be symmetrical. Nonetheless, the presence of the word "deer" can indicate that a narrative should be read to identify whether "animal crash" was also selected from the non-text portion of the UD-10.

This study will have three major activities. First, we will apply a variety of text-mining methods to a large set of UD-10 narratives from 2016 and explore the results of these methods. For example, one approach in this exploration phase will be to use PTM on the narratives and infer patterns of word associations from the data themselves. These word associations are referred to as "topics" and the association of each narrative with each topic is also measured as part of the output. We can then select narratives with strong associations with each topic and look at the other data elements to understand what kinds of crashes tend to produce each topic. This approach is designed to complement text-based quality-control processes already being used by CJIC.

This activity will involve discussions with OHSP staff to identify specific data elements that might be of most value to investigate. That is, which data elements seem to be least consistent, most important, or most confusing to police officers? These could be good targets for text mining (if the narratives contain the appropriate information).
The second activity will be to use the results of the methods exploration to extract new data elements to add to the dataset. For example, some word patterns (topics) may provide additional detail about subtypes of pedestrian or bicyclist crashes (e.g., dart-out vs. crossing errors), while others might indicate specific types of cell-phone use (e.g., texting, calling, reaching, etc.). The goal is to enhance the crash dataset with items from the narrative that could be used in analysis to better understand crashes in Michigan.
The third activity will follow on the first to develop specific quality control (QC) "rules." The specific mechanisms of QC will not be addressed in this study, but we will look at which data elements have strong enough associations with text elements that text mining should identify those where text suggests the presence of a feature that was not indicated in the data. The key issue here is to be sure that the potential text-based rules are specific enough to avoid large numbers of "false alerts" where QC is flagged, but there is no error. This evaluation will be based on a comparison of human-coded narratives to machine-coded narratives.

Is this strategy part of the TRCC Strategic Plan?

Recommendation 3 of 3 for Crash: Improve Crash Quality Control Measures

What performance measure will be used to evaluate the effectiveness of this strategy?

1. Final report detailing analyses and results for each crash category (or text category) analyzed. Final report will also include a section recommending a set of QC rules that would include text mining and the potential level of improvement in quality for each variable processed.
2. File with flags that can be linked to crash dataset and used for analysis (SAS and CSV formats)

Requested Funding Amount: (provide budget breakdown – personnel; contractual costs; supplies/operating; equipment; and indirect costs, etc.…)

The requested funding amount is $60,515 to support personnel working on the text mining project.

Contact person for this project (name, agency, phone, email)

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Project Title:

Upgrades to Roadsoft and ESRI Roads & Highways to store and manage statewide MIRE data

Which emphasis area will this project address?
(i.e. Crash, Citation, Vehicle/Driver, EMS & Trauma Data, Roadway, TRCC, or MISC)

Roadway and TRCC will be addressed with this project.

Which traffic records data attribute(s) will this project improve?
(i.e. timeliness, accuracy, completeness, uniformity, integration, and accessibility)

Roadway data completeness, timeliness, uniformity, and accessibility will be addressed with this project.

Previous efforts have created a set the tools for the collection of the mandated Model Inventory of Roadway Elements (MIRE) Fundamental Data Elements (FDE) at the local agency level using an existing local agency safety and asset management package.

Integration, accessibility, and usability of roadway MIRE data for meaningful crash analysis are the main goals of this project. This new project will allow for future roadway data storage, data management and updates and integration / utilization by local agencies, regional and metro planning organizations and the State of Michigan.

Background/Problem Statement:

The MIRE FDEs are federally required by the MAP-21/FAST-Act transportation legislation which will aid in crash analysis. Previously, Michigan has developed a tool for collecting all MIRE FDEs from the 616 local transportation agencies through enhancements to the Roadsoft software tool.

MDOT is acquiring new software, ESRI Roads & Highways, to manage the data (attributes) for the statewide network of roads, streets and highways for all transportation agencies in the state. It will become the data repository for the statewide transportation system information.

The Transportation Asset Management Council (TAMC) has cross governmental responsibility and authority for road data collection. TAMC supplies local transportation agencies with the tools and guidelines for collecting roadway assets to report on a statewide basis. TAMC currently uses one software tool called Roadsoft for required data collection on roadway assets. This tool is used by hundreds of local agencies and is supported by funding from MDOT, FHWA, and Michigan Tech University.

It will be necessary to integrate / link Roadsoft and ESRI Roads & Highways to establish and populate the new MIRE data repository in ESRI Roads & Highways. Additionally, the new ESRI Roads & Highways software system has reporting and updating capabilities that need to be customized to meet the Federal requirements for sharing the 38 MIRE Fundamental Data Elements information.

It will be necessary to disseminate existing base data to the local transportation agencies through this proposed linkage of the two software systems especially for those agencies that do not use Roadsoft. This will allow the local agencies to review, validate, update existing information and populate the MIRE database with missing information. This is expected to be a multi-year effort which has a Federal deadline of 09/30/2026.

A long-term goal will be to include capabilities to manage all 202 Federal MIRE data elements.

Impact Statement (What will happen if funding is not provided for this program? How will it improve the above traffic records data attribute?)

This project is a continuation of the effort helping Michigan meet the federally required MIRE FDE collection mandate. If this project is not funded, MDOT may not meet the federal HSIP requirements for a complete statewide MIRE database. Without funding for this project, data collected and stored by other means may not be accurate, complete, timely, or be readily accessible to local agencies and support future data linkage and integration projects. The proposed method of collection and data storage takes advantage of a state-of-the-art geospatial database system, local agency knowledge of their own road network to meet reporting standards, and provides agencies useful access to the data for safety analyses and other business processes after it has been used for reporting and storage.

Utilizing locally collected and validated data is expected to be the most cost effective long-term solution to large data collection efforts such as MIRE since data is collected and used on the local, regional and state level.

How will this strategy be achieved?

MDOT is implementing new software and hardware that has the capability to support the MIRE data collection, storage and reporting requirements. In the following statements, we estimate that each phase is approximately one fiscal year. The first phase will include database configuration and system design, creation of web services, development of the prototype, testing and documentation. The second phase would include pilot use of the new system by a small sample of volunteer local transportation agencies to validate and debug through actual field performance. The third phase, which is expected to be multi-year, will provide outreach and training to local agencies on using the MIRE tools to

collect and upload the data, disseminate base data to the local transportation agencies, validate base data and gather missing data, and update the MIRE repository. It will also include the ongoing maintenance and updating of the MIRE data by the state and local transportation agencies. This proposed project combines the resources of MDOT, DTMB, TAMC, ESRI, DTSgis, and Michigan Tech University. It will take advantage of the existing investment that has already been made in Roadsoft and ESRI Roads & Highways, and further the utilization of available technologies to improve the exchange of data in crash analysis.

This strategy has already gained the State of Michigan notoriety as having an innovative solution to collecting MIRE data by the National Cooperative Research Program (NCHRP) Synthesis 48-09 Integration of Roadway Safety Data from State and Local Sources.

Is this strategy part of the TRCC Strategic Plan?

Creating a formal set of guidelines for the collection of MIRE and MIRE FDE and creating awareness with TAMC are part of the TRCC FY2016-FY2020 Strategic Plan's Roadway component recommendation 1 of 2.

What performance measure will be used to evaluate the effectiveness of this strategy?

Successful system prototype development will be validated by the completion of the testing phase and documentation. The pilot project phase will be evaluated by successful use of the prototype system by the volunteer local transportation agencies and development of the necessary enhancements to deliver a full functioning system. Successful statewide MIRE database development will be validated by delivery of a statewide system with up-to-date MIRE data that has been validated by the local transportation agencies and available for use by safety systems for crash analysis and development of recommendations for crash reduction improvements as locations through the state.

Requested Funding Amount:
(Provide budget breakdown – personnel; contractual costs; supplies/operating; equipment; and indirect costs, etc....)

MDOT Contractors: Phase 1 (FY18): $ 140,000
Future Phases: $ 300,000 - $2,000,000

Contact person for this project (name, agency, phone, email)

Mike Toth
Michigan Department of Transportation
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Project Title:

Institute of Police Technology and Management (IPTM) Regional Training

Which emphasis area will this project address?
(i.e. Crash, Citation, Vehicle/Driver, EMS & Trauma Data, Roadway, TRCC, or MISC)

MISC

Which traffic records data attribute(s) will this project improve?
(i.e. timeliness, accuracy, completeness, uniformity, integration, and accessibility)

Completeness

Background/Problem Statement:

Training enables law enforcement officers to be aware of and understand current issues to successfully address traffic safety priorities. The information provided can increase the knowledge and skills of officers who use traffic enforcement to reduce crime, traffic deaths and injuries.

Revenue sharing and budget cuts continue to require departments to work with a reduced workforce. The cost to send individual officers to venues across the state and the corresponding need for overtime scheduling to replace these personnel makes traffic safety training a luxury that many agencies cannot afford. Bringing instructional opportunities to regional areas of the state will provide exposure to valuable information to more officers, as agencies will not have to pay for travel costs and overtime to replace personnel will be reduced.

The IPTM classes have filled up almost as soon as they are announced, sometimes even before. Officers have registered from across the state. Attendees have been very happy with the IPTM level of training and appreciative of the opportunity.

Impact Statement (What will happen if funding is not provided for this program? How will it improve the above traffic records data attribute?)

Without training specific to traffic safety efforts, deterrence efforts will be reduced in their effectiveness and public safety will be impacted negatively. Law enforcement officers will not be knowledgeable about changing traffic safety laws, trends and techniques and safety on traffic stops may be compromised. Prosecution may be impacted when officers fail to secure important evidence during impaired driving arrests or are unable to articulate pertinent information while testifying in court. There is no statewide alternative source for this type of training in Michigan.

How will this strategy be achieved?

The Traffic Improvement Association of Michigan (TIA) is very interested in becoming a regional training hub for law enforcement in Southeast Michigan. The Traffic Improvement Association of Michigan (TIA) will host three reconstruction training courses from the Institute of Police Technology and Management (IPTM).

The Michigan State Police (OHSP or Criminal Justice Information Center (CJIC)) will coordinate the advanced reconstruction courses for the rest of the interested law enforcement agencies in Michigan. We estimate three additional IPTM reconstruction courses; for a total of up to eight reconstruction training programs ($20,000 each`).

Is this strategy part of the TRCC Strategic Plan?

It is not directly specified, but it will assist with providing more complete crash reporting.

What performance measure will be used to evaluate the effectiveness of this strategy?

Evaluations are done to determine if there was increased knowledge and usefulness for attendees after completing the training.

Requested Funding Amount: (provide budget breakdown – personnel; contractual costs; supplies/operating; equipment; and indirect costs, etc.…)

$160,000: to cover IPTM contractual costs ($136,000), indirect costs ($3,000) and training logistics ($21,000).

Contact person for this project (name, agency, phone, email)
Jessica Riley
OHSP; Traffic Records Program Coordinator
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Project Title:

Global Positioning for Enhanced Traffic Crash Reconstruction

Which emphasis area will this project address?

The Global Positioning for Enhanced Traffic Crash Reconstruction project will provide all law enforcement agencies in Michigan with the opportunity to utilize cutting edge technology and advanced traffic crash investigative techniques which will improve the Crash database.

Which traffic records data attribute(s) will this project improve?

This project will minimize road closure duration, improve accuracy and completeness of traffic crash documentation, and ensure proper civil infraction and/or criminal charges are presented to county prosecutors and the court system.

Background/Problem Statement:

During 2016 the 8 member MSP Traffic Crash Reconstruction Unit (TCRU) was involved in 504 fatal traffic crash investigations statewide. The 504 reconstructions account for approximately 50% of all fatal crash investigations in the State of Michigan

and approximately 50% of those involved assisting local agencies. 45 crime scenes (mainly homicides) were also processed by the TCRU.

The TCRU was recently reassigned to the Field Support and Aviation Section and began working closely with them to integrate the department Unmanned Arial Systems (UAS) into traffic crash investigation. During the testing of this process it was determined that the accuracy of the measurements obtained from photographs taken from the UAS was in question. Further testing determined that the only way acceptable measurement could be utilized was to incorporate GPS documented points with the UAS photographs.

With this equipment, the Aviation Unit and the Traffic Crash Reconstruction Unit will be able to clear crash scenes, both large and small, in a fraction of the time it would potentially take utilizing traditional measuring techniques.

Impact Statement (What will happen if funding is not provided for this program? How will it improve the above traffic records data attribute?)

If this project is not implemented the UAS will not be able to be used for any traffic crash or crime scene investigation due to the current accuracy issues.

How will this strategy be achieved?

The Global Positioning for Enhanced Traffic Crash Reconstruction project will be implemented statewide upon receipt of the equipment. All law enforcement agencies are encouraged to utilize the services of the Michigan State Police Traffic Crash Reconstruction Unit.

Is this strategy part of the TRCC Strategic Plan?

No

What performance measure will be used to evaluate the effectiveness of this strategy?

Minimizing road closure duration and reducing secondary traffic crashes are high priority objectives for both law enforcement and road authorities. The MSP has recently set a goal of having all patrol personnel trained in Traffic Incident Management (TIM).

Technology, such as the total station, has reduced scene investigation times by approximately 50% over the last decade. New advances, such as the GPS units, have the potential to reduce certain investigations by an additional 25% over traditional investigative techniques. A decade ago a typical traffic crash investigation may have taken 3 to 4 hours, today that is down to 1 to 2 hours. With the GPS units, the potential to reduce the time frame to an hour or less is a reality.

Efficient traffic crash investigation procedure will result in achieving these objectives.

The combination of these efforts will undoubtedly reduce the number of traffic crashes that occur in Michigan.

Requested Funding Amount

Request eleven (11) Leica Geosystems GS14 GNSS Receiver with CS20 Field Controller

The purchase of 11 GPS unit will provide one unit for each MSP Traffic Crash Reconstruction Specialist (TCRS) assigned to each MSP District and one for each of the three UAS that are assigned to the MSP Aviation Unit. These three additional units will provide effective and efficient crash investigation for local law enforcement agencies when an MSP TCRS is not involved.
Attached proposal includes a detailed breakdown of requested equipment and associated costs. Training is included in the proposal. No additional costs are expected.
There is currently no match funding available within the TCRU.
Total cost for eleven units and software is approximately $210,000.00

Contact person for this project
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Special Operations Division
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Project Title:

Michigan Traffic Crash Data and Information Brochure (update)

Which emphasis area will this project address?
(i.e. Crash, Citation, Vehicle/Driver, EMS & Trauma Data, Roadway, TRCC, or MISC)

MISC

Which traffic records data attribute(s) will this project improve?
(i.e. timeliness, accuracy, completeness, uniformity, integration, and accessibility)

Accessibility

Background/Problem Statement:

The brochure was published in the past to give Action Teams, Speakers, Universities, Crash Data users and easy guide to distribute to access the state's free crash resources. This eliminates the need for engineers, law enforcements, legislators, and media to blindly search for the most accurate places to find crash data and contacts to assist with crash data needs. Current and correct data is essential for identifying traffic safety problems, planning enforcements and allocating resources. The four resources within this booklet are free and accessible online.

Impact Statement (What will happen if funding is not provided for this program? How will it improve the above traffic records data attribute?)

The current brochure is dated and lacks the most up to date addresses and contact information. If this continues to be distributed it will be frustrating to be lead to incorrect information by the user. This is also a great free brochure to direct people to the free and current resources to collect Michigan Traffic Crash Data, and without production it would no longer give the public benefit to this information in one place.

How will this strategy be achieved?

The brochure will be updated with the new contact information, the OHSP address, and any needed resource changes. We will then make it available for dissemination to the members of the TRCC group as well as any action teams or others that are suggested by the members. If any mailing plan is needed for distribution we will incorporate that as well.

Is this strategy part of the TRCC Strategic Plan?

No, but it enables anyone looking for crash data to have a clear-cut path to accessing it and the needed contacts.

What performance measure will be used to evaluate the effectiveness of this strategy?

Devising a mailing strategy as well as a dissemination plan, we will be able to track use by feedback from Action Team Chairs, TRCC members, media and University Partners.

Requested Funding Amount: (provide budget breakdown – personnel; contractual costs; supplies/operating; equipment; and indirect costs, etc....)

$5,000 will be used for printing and mailing of the brochure. Graphic design and layout can be done in-house by the Office of Highway Safety and Planning.

Contact person for this project (name, agency, phone, email)
Jessica Riley
Office of Highway Safety Planning
517-284-3112
rileyj9@michigan.gov

Project Title:

UD-10 Training Support

Which emphasis area will this project address?

(i.e. Crash, Citation, Vehicle/Driver, EMS & Trauma Data, Roadway, TRCC, or MISC)
Crash

Which traffic records data attribute(s) will this project improve?
(i.e. timeliness, accuracy, completeness, uniformity, integration, and accessibility)

Timeliness, Accuracy, Completeness, Uniformity

Background/Problem Statement:

The MSP/CJIC/Traffic Crash Reporting Unit is funding a UD-10 Trainer position. The UD-10 Trainer provides crash training, in various mediums, to law enforcement agencies on the revised UD-10 crash form implemented in January 2016. In addition, they work with the crash analyst to identify any reporting problems and possible misinterpretations of new fields, codes, etc. Specialized agency specific trainings are offered to agencies where there may be concern.

The UD-10 Trainer is the instructor and subject matter expert for the Crash Location Improvement Project (CLIP) interface. They will provide free training and assistance to agencies that incorporate the interface.

This project would be a continuation of the project that was granted in the FY17 Call for Projects. This project is intended to provide funding for the UD-10 Trainer to obtain the necessary training tools to support the training (i.e., USB drives with UD-10 information, printed manuals for police academies, etc.) As of March 2018, the following accomplishments have been made:

1. Sgt. Scott Carlson has conducted 51 trainings, with over 1,600 attendees and spanning 118 agencies/organizations.
2. Published and posted Official Correspondence for CLIP 2.0
3. Published Quick Start Guide for CLIP 2.0
4. Presented at NHTSA Pedestrian/Bicycle Assessment
5. Provided autonomous vehicle background to MSU Law professors
6. Presented at Traffic Safety Summit on Traffic Crash Data Quality

Impact Statement (What will happen if funding is not provided for this program? How will it improve the above traffic records data attribute?)

UD-10 training is extremely important in Michigan to continue to improve the crash data. Troubleshooting the UD-10 revision concerns will be a highlight of the training efforts in FY18. If funding was not provided, the UD-10 training program would cease. UD-10 training is imperative to ensure that timely, accurate, complete, and uniform crash data is received.

How will this strategy be achieved?

Various UD-10 trainings and agency specific trainings will be conducted throughout the State. There will be a focus on analyzing the revised data on the UD-10 to identify reporting concerns and misinterpretation of new fields.

Is this strategy part of the TRCC Strategic Plan?

Yes, this is part of the Crash Recommendation 3, which is to Improve Crash Quality Control Measures. Specifically, it states to define and establish quality control measures for the Uniformity area. The UD-10 trainings improve the uniformity of the crash data by educating law enforcement officers on the proper completion of the form, and the importance of completing key fields.

What performance measure will be used to evaluate the effectiveness of this strategy?

Surveys are requested after each training, which will be used to ensure the training is effective. The UD-10 Trainer will work with unit staff to analyze agency specific data to determine if there is an improvement in the quality and completeness of the data. In addition, if there were specific data concerns, ensure these have been rectified after training.

Requested Funding Amount: (provide budget breakdown – personnel; contractual costs; supplies/operating; equipment; and indirect costs, etc.…)

$50,000

- Training materials and supplies

Contact person for this project (name, agency, phone, email)
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Project Title:

CLIP (Crash Location Improvement Project) Enhancements

Which emphasis area will this project address?
(i.e. Crash, Citation, Vehicle/Driver, EMS & Trauma Data, Roadway, TRCC, or MISC)

Crash

Which traffic records data attribute(s) will this project improve?
(i.e. timeliness, accuracy, completeness, uniformity, integration, and accessibility)

Accuracy, Completeness, Uniformity, Integration

Background/Problem Statement:

The FY16 CLIP project generated the requirements for the CLIP interface. LexisNexis has produced this off-the shelf interface and the Michigan State Police (MSP) would like to customize the interface for enhanced functionality. This will be done through the feedback that will be obtained from the MSP Lansing post pilot project.

Impact Statement (What will happen if funding is not provided for this program? How will it improve the above traffic records data attribute?)

If we cannot enhance the CLIP interface, LexisNexis law enforcement users (including the MSP) will be using a location tool that is not as user friendly and missing improved functionality. The zooming and final mapping capabilities will be less than desired, and will require more time from the officer.

The CLIP interface will work, but will be missing key functionality that will make this interface extremely easy to use. In addition, it will save law enforcement officers time with easy to use zooming and mapping functionality.

The FY16 CLIP interface that was developed was pushed only to MSP posts. There is a different platform and additional programming that would need to be done to push CLIP to the remaining LexisNexis agencies. This revised request will include pushing the CLIP interface, along with the enhancements, to all LexisNexis agencies. Currently, LexisNexis submits about 65% of the electronic submissions in the state.

How will this strategy be achieved?

This effort will be achieved by documenting the feedback received from the MSP Lansing post pilot project. These enhancements will be sent to LexisNexis and the state team will continue to work with LexisNexis to implement and test until all enhancements are implemented and functioning as expected.

Is this strategy part of the TRCC Strategic Plan?

Yes, this is part of the Crash Recommendation 3, which is to Improve Crash Quality Control Measures. Specifically, it states to define and establish quality control measures for the areas of Uniformity and Integration. The enhancements to the CLIP interface will provide easy to use functionality that will make crash locating uniform by integrating the data directly from the Michigan Framework.

What performance measure will be used to evaluate the effectiveness of this strategy?

TCRS database certification testing will be performed on LexisNexis to ensure the correct location information is being sent by the vendor.

Requested Funding Amount: (provide budget breakdown – personnel; contractual costs; supplies/operating; equipment; and indirect costs, etc.…)

Contractual Costs - $ 50,000 – Original Request
$329,000 – Additional Funding Requested (actual quote was received)
$379,000 – Total Funding Request

The original request for $50,000 was based on a few known improved functionality requests. Since receiving additional feedback, we have identified several enhancements that will further improve CLIP, and provide CLIP to all LexisNexis eCrash users.

Milestones	Description	Cost
1	Integrate CLIP 2.0 within the Core Framework	**$75,800**
2	Export latitude and Longitude coordinates and map version to the electronic crash data file	**$75,800**
3	Enhance eCrash Application User interface to include the following enhancements: Automatic launch of Clip Module Modify map navigation pane Ability to export map image Insert Latitude and Longitude coordinates in the eCrash application as well as in the rendered PDF Add a Validation Rule reminding user to geo-locate	**$75,800**
4	Deploy to Test Environment	**$75,800**
5	Deploy to Production Environment	**$75,800**
	Total	**$379,000**

Contact person for this project (name, agency, phone, email)
Sydney Smith
MSP/CJIC
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Project Title:

Data Integration for the Reduction of Traffic Crash Fatalities

Which emphasis area will this project address?
(i.e. Crash, Citation, Vehicle/Driver, EMS & Trauma Data, Roadway, TRCC, or MISC)

All.

Which traffic records data attribute(s) will this project improve?
(i.e. timeliness, accuracy, completeness, uniformity, integration, and accessibility)

Timeliness, accuracy, completeness, uniformity, integration, and accessibility

Background/Problem Statement:

2017 was the deadliest since 2007 for drivers on Michigan roads, preliminary state data shows. Experts say an improving economy, lower gas prices and possibly increased texting and driving appear to be driving the increase in road deaths, which have also gone up nationally after a big decline during the Great Recession.

Traffic crashes cost Michigan over $4.8 billion in monetary costs and over $9 billion in total costs each year. (*UMTRI Societal Costs of Crime and Crash Study - 2011 Update)

Today various State of Michigan Departments share limited traffic crash data sets through a mostly manual process for specific data reporting needs. The current data sharing is largely done through data extracts and does not provide a comprehensive view of all data elements for a 360-degree view of the topic. Additionally, there is no automated and fully integrated system or process by which the State Departments can share traffic records information in near real-time for improved data analysis to improve Michigan's traffic safety programmatic and funding decisions.

This project will address the following emphasis areas: develop linked datasets including merged data for crashes and injury surveillance information, and merged data for crashes and citations, from Michigan's 2009 National Highway Traffic Safety Administration (NHTSA) Traffic Records Assessment recommendations.

This project will improve the following traffic records data attribute(s):
- Identifying traffic safety problems and develop effective countermeasures through more comprehensive traffic safety research capabilities
- Effectively plan millions of dollars in federal traffic safety, transportation, and criminal justice program funding
- Meeting specific and measurable objectives of fatality and injury reduction

Moreover, this project will improve the traffic record crash data timeliness, accuracy, completeness, uniformity, integration, and accessibility by providing:

-Improved traffic safety data analysis and enhance traffic safety program development
-Improved timeliness of removing drunk drivers from Michigan's roadways
-Enhanced information for vehicle safety enhancements and 3rd party liability
-Improved data analysis for traffic safety legislation
-Position Michigan as a model state with a fully integrated, near real-time traffic crash data analysis system.

Impact Statement (What will happen if funding is not provided for this program? How will it improve the above traffic records data attribute?)

- Better allocation of assets on the road to decrease response times and injury severity
- Ties in State and Local Agencies, Emergency Response Elements, Healthcare Resources
- Goal is unified system with predictive capabilities

How will this strategy be achieved?

1. Expansion of datasets to include mid-to-long term datasets of TRCC proper:

Sequence of events from Crash through Hospital Discharge (OHSP)
Outpatient Dispositions (OHSP)
Injury severity against driver age categories (OHSP)
Types of vehicles vs. types of injuries (CRASH)
Crash involved drivers with suspended licenses (MDOS)
Connect crashes to roadway features (MDOT)
Injuries and associated treatment data (UMTRI)
Crash data tie in to census data, especially for senior drivers and commuting (i.e. Journey to Work data)

2. Inclusion of datasets and interfaces with public and private partners, for example, UofM, MSU (trauma sets, insurance dataset), GM and Chrysler (autonomous black boxes), Child Car Seat Safety, motorcycle safety class dataset.

3. Implementation costs for external vendor services (e.g., Dataworks and OPTUM).

4. BI Portal Setup and Development Support for Partner Agencies and other Users (State Departments, Universities, Commercial Companies, the Public) for extended licenses outside of SOM.

Is this strategy part of the TRCC Strategic Plan?

Yes.

What performance measure will be used to evaluate the effectiveness of this strategy?

Analysts from MSP, MDOT, DHHS, SCAO, MDOS, local police departments, and Universities will be able to study the following data linkages and merged data:
• Crash to Death certificates (OHSP); Deaths that occur within 30 days (or other intervals) after a crash (CRASH)
• Connect DUI arrest with BAC test results (CRASH)
• Connection between # of tickets written by officers/troopers to crash locations (CRASH)
• Mapping of adjudicated crash incidents and crime activities (DDACTS) - (CRASH)
• GDL status and studies (CRASH)
• Safety belts & helmets linked to injury severity (OHSP)
• Analysis of Geographic distribution crashes against injury severity (OHSP)
• Connection of fatalities with DUI offenses (CRASH)
• EMS response times

These data linkages represent the Short-Term and Short / Mid-Term EIM Crash Data Linkage goals. All data linkages above will be implemented but the implementation is dependent on goals. All data linkages above will be implemented but the implementation is dependent on access to the listed data sets from participating SOM Departments and Universities for integration into the MSPData Hub and the Traffic Crash Consumption Model.

Specifically, the project includes profiling, cleansing, mastering, real-time integration and geocoding of the data sets and access to the Crash data for analysts to create and share

their own analysis / visualizations. The project also includes the setup of new role-based Portals for analysts to share visualizations with their Department end users and local law enforcement within the MSP WebFOCUS environment.

The project also includes the creation and sharing of crash predictive model prototypes to score the likelihood by ½ mile square block for all of Michigan in terms of fatal crashes, crashes with serious injury, and crashes with property damage. Lastly, the project includes the sharing of MSP base crash maps that can be re-used and pulled into the end user Traffic Crash Portals.

Requested Funding Amount: (provide budget breakdown – personnel; contractual costs; supplies/operating; equipment; and indirect costs, etc.…)

$1.9 Million
Expanded cost proposal **includes** Public Zone Server software for shared use outside of Zone 1
Cost proposal also **includes** $100K in physical equipment for servers to accommodate additional storage and application usage outside the original proposal.

Contact person for this project (name, agency, phone, email)

Deepinder Uppal
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uppald@michigan.gov

COMPLETED PROJECTS

VEHICLE

Recommendation: 2 of 2
Improve the data quality control program for the Vehicle data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Deficiency Identified:
Based upon the Model Performance Measure for State Traffic Records Systems, the state feels that we are compliant at a high level.

Accomplishments: (as of May 2016)
As stated above, the Michigan Department of State feels they are compliant at a high level regarding this recommendation. No further accomplishments are necessary.

Appendix A

TRCC Charter

Mission
Improve the quality, timeliness and availability of crash related data, information and systems to enable stakeholders and partners to identify and resolve traffic safety issues

General Information

1. Include representatives from highway safety, highway infrastructure, law enforcement and adjudication, public health, injury control, and motor vehicle and driver licensing agencies, and motor carrier agencies.

2. The TRCC is an Action Team located under the Governors Traffic Safety Advisory Commission (GTSAC).

3. Provide a forum for the discussion of highway safety data and traffic records issues and report on any such issues to the agencies and organizations in the State that create, maintain, and use highway safety data and traffic records.

4. Consider and coordinate the views of organizations in the State that are involved in the administration, collection, and use of highway safety data and traffic records systems.

5. Represent the interest of the agencies and organizations within the traffic records system to outside organizations.

6. Review and evaluate new technologies to keep the highway safety data and traffic records systems up-to-date.

7. Facilitate and coordinate the integration of systems within the state, such as systems that contain crash related medical and economic data with traffic crash data.

8. Form sub-committees and action teams as appropriate.

9. The TRCC will not adopt any formal policy or rules intended to impose authority on any group, agency or individual.

10. Within the TRCC there shall exist an 'Executive Committee'.

11. The TRCC will keep the GTSAC apprised of TRCC activity, projects and/or accomplishments through reports at periodic GTSAC meetings.

12. Create and monitor a Traffic Records System Strategic Plan that:
    - ❖ addresses existing deficiencies in a State's highway safety data and traffic records system
    - ❖ specifies how deficiencies in the system were identified
    - ❖ prioritizes the needs and set goals for improving the system
    - ❖ identifies performance-based measures by which progress toward those goals will be determined
    - ❖ specifies how the State will use section 405-c and other funds of the State to address the needs and goals identified in its Strategic Plan.

Executive Committee

The 'Executive Committee' will be comprised of:

- ➢ Michigan Department of State Police
- ➢ Michigan Department of State
- ➢ Michigan Department of Transportation
- ➢ Michigan Department of Health and Human Services
- ➢ Michigan State Courts Administration Office
- ➢ Michigan Office of Highway Safety Planning
- ➢ Michigan Department of Technology, Management, & Budget

Each member shall have the authority to authorize changes of and/or expend agency funds to support the Michigan Traffic Records System.

The Executive Committee shall appoint a committee chair on a bi-annual basis who will serve as chair for both the Executive Committee and the general TRCC body.

Appendix B

2014 Traffic Records Assessment – Executive Summary

Out of 391 assessment questions, Michigan met the Advisory ideal for 205 questions, or 52.4% of the time; partially met the Advisory ideal for 44 questions, or 11.3% of the time, and did not meet the Advisory ideal for 142 questions or 36.3% of the time.

As Figure 1 illustrates, within each assessment module, Michigan met the criteria outlined in the *Traffic Records Program Assessment Advisory* 89.5% of the time for Traffic Records Coordinating Committee Management, 100% of the time for Strategic Planning, 77.3% of the time for Crash, 61.5% of the time for Vehicle, 55.6% of the time for Driver, 39.5% of the time for Roadway, 29.6% of the time for Citation / Adjudication, 43.9% of the time for EMS / Injury Surveillance, and 30.8% of the time for Data Use and Integration.

Figure 1: Rating Distribution by Module

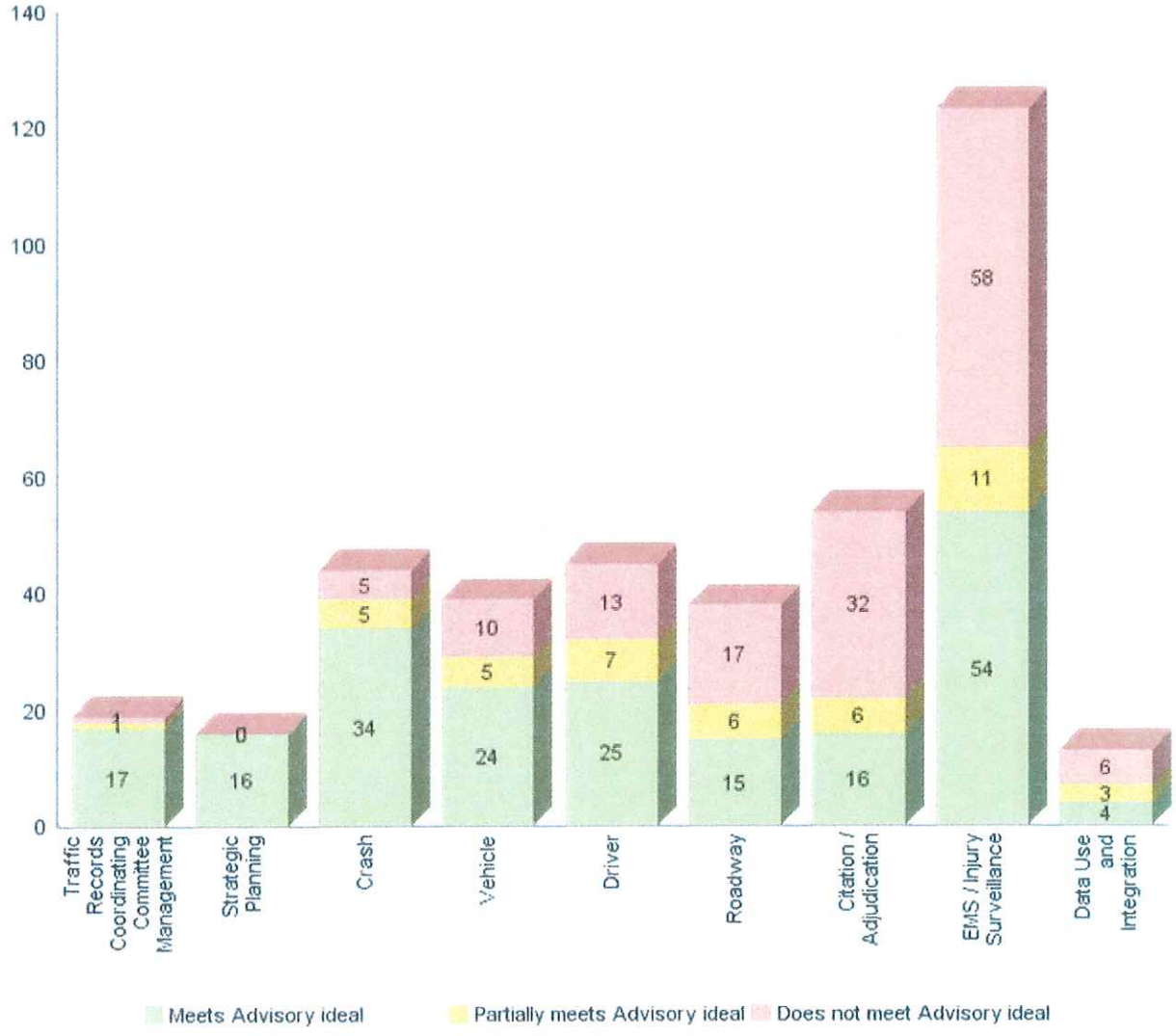

Figure 2: Assessment Section Ratings

	Crash	Vehicle	Driver	Roadway	Citation / Adjudication	EMS / Injury Surveillance
Description and Contents	100.0%	100.0%	66.7%	100.0%	52.6%	60.8%
Applicable Guidelines	100.0%	72.7%	100.0%	50.0%	64.9%	93.0%
Data Dictionaries	100.0%	100.0%	100.0%	70.0%	47.6%	83.3%
Procedures / Process Flow	83.3%	100.0%	94.1%	91.7%	63.0%	82.0%
Interfaces	73.3%	84.8%	66.7%	88.9%	81.0%	33.3%
Data Quality Control Programs	84.8%	57.7%	56.4%	40.3%	38.5%	56.9%
Overall	**89.3%**	**77.6%**	**75.4%**	**66.7%**	**56.1%**	**66.1%**

	Overall
Traffic Records Coordinating Committee Management	95.3%
Strategic Planning for the Traffic Records System	100.0%
Data Use and Integration	61.6%

Recommendations

Figure 2 shows the aggregate ratings by data system and assessment module. Each question's score is derived by multiplying its rank and rating (very important = 3, somewhat important = 2, and less important = 1; meets = 3, partially meets = 2, and does not meet = 1). The sum total for each module section is calculated based upon the individual question scores. Then, the percentage is calculated for each module section as follows:

$$Section\ average\ (\%) = \frac{Section\ sum\ total}{Section\ total\ possible}$$

The cells highlighted in red indicate the module sub-sections that scored below that data system's weighted average. The following priority recommendations are based on improving those module subsections with scores below the overall system score.

According to 23 CFR Part 1200, §1200.22, applicants for State traffic safety information system improvements grants are required to

> *"Include(s) a list of all recommendations from its most recent highway safety data and traffic records system assessment; identifies which such recommendations the State intends to implement and the performance measures to be used to demonstrate quantifiable and measurable progress; and for recommendations that the State does not intend to implement, provides an explanation."*

Michigan can address the recommendations below by implementing changes to improve the ratings for the questions in those section modules with lower than average scores. Michigan can also apply for a NHTSA Traffic Records GO Team, for targeted technical assistance.

Crash Recommendations

Improve the procedures/ process flows for the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Improve the interfaces with the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Improve the data quality control program for the Crash data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Vehicle Recommendations

Improve the applicable guidelines for the Vehicle data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Improve the data quality control program for the Vehicle data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Driver Recommendations

Improve the description and contents of the Driver data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Improve the interfaces with the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Improve the data quality control program for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Roadway Recommendations

Improve the applicable guidelines for the Roadway data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Improve the data quality control program for the Roadway data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Citation / Adjudication Recommendations

Improve the description and contents of the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Improve the data dictionary for the Citation and Adjudication systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Improve the data quality control program for the Citation and Adjudication systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.

EMS / Injury Surveillance Recommendations

Improve the description and contents of the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Improve the interfaces with the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Improve the data quality control program for the Injury Surveillance systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Data Use and Integration Recommendations

Improve the traffic records systems capacity to integrate data that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Appendix C

Acronyms

Acronym	Definition
AAMVA	American Association of Motor Vehicle Administrators
CFR	Code of Federal Regulations
CJIC	Criminal Justice Information Center
CMV	Commercial Motor Vehicle
CSS	Center for Shared Solutions
DAT	Data Action Team
DUI	Driving Under the Influence
EMS	Emergency Medical Services
FARS	Fatality Analysis Reporting System
FHWA	Federal Highway Administration
FY	Fiscal Year
GTSAC	Governor's Traffic Safety Advisory Commission
ISS	Injury Surveillance System
JDW	Judicial Data Warehouse
LEIN	Law Enforcement Information Network
LTAP	Local Technical Assistance Program
MCA	Medical Control Authority
MDHHS	Michigan Department of Health and Human Services (formerly Michigan Department of Community Health - MDCH)
MDOS	Michigan Department of State
MDOT	Michigan Department of Transportation
MDTMB	Michigan Department of Technology, Management, & Budget
MHA	Michigan Health & Hospital Association
MIRE-FDE	Model Inventory of Roadway Elements – Fundamental Data Elements
MOU	Memoranda of Understanding
MSP	Michigan Department of State Police
NHTSA	National Highway Transportation Research Administration
NIEM	National Information Exchange Model
NMVTIS	National Motor Vehicle Title Information System
OHSP	Office of Highway Safety Planning
PRISM	Performance Registration System and Management
SCAO	State Court Administrative Office
SEMCOG	Southeast Michigan Council of Governments
STRAP	State Traffic Records Assessment Program
TAMC	Transportation Asset Management Council
TAMP	Transportation Asset Management Plan
TAMS	Transportation Asset Management System
TBD	To Be Determined
TCRS	Traffic Crash Reporting System
TCRU	Traffic Crash Reporting Unit
TDMS	Traffic Data Management System
TRCC	Traffic Records Coordinating Committee
WMU	Western Michigan University

Appendix D

TRCC - Current Membership

Last	First	Dept.-Org	Database	Email	Work Phone
Bott	**Mark**	**Michigan Department of Transportation**	**Roadway**	**bottM@michigan.gov**	**517-335-2625**
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Executive Committee = Bolded rows – Revised 5/14/18

Appendix E
Signature Page

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Michigan Department of Transportation

5/21/18
Date

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Michigan State Police – CJIC

5/18/18
Date

Cody Gross
State Court Administrative Office

5/21/18
Date

John Harris
Michigan Department of State of Michigan

5/21/18
Date

Sabrina Slee
Michigan Department of Health and
Human Services

5/21/18
Date

John Kalanquin
Michigan Department of Technology,
Management, and Budget

5-21-2018
Date

Anne Readett
Michigan State Police – OHSP

5/21/18
Date